How to Plan research?

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Sectional President-Environmental Science (2020-21)
Indian Science Congress

WHO IS A SCIENTIST OR RESEARCHER?

- **A person who is studying or has expert knowledge of one or more of the natural or physical sciences.** '*a research scientist*'

- **A person who learns Science and especially natural science is a Scientific Investigator**

- **A person who is trained in a science and whose job involves doing scientific research or solving scientific problems.... "*A Scientist*"**

- **Scientist is a blind man who is searching a black cap in the dark room which is not there, and he finds some thing new which was believed not to be there .... *My opinion about a scientist***

Where to Begin?

Let's say you need some research resources for a paper you're writing for a class. You have a general topic – lactic acid bacteria – and you know you need resources, but you aren't sure how to get started.

Your impulse would be to start with the Internet, but instead, first consider what you **need** to find:

Quality, credible resources

about or related to Lactic Acid Bacteria

Narrowing What You Need

- *"LAB" is a very, very broad topic, and trying to research a very, very broad topic is very, very difficult.*
- *You need to narrow the topic down to something more specific – you can narrow the topic by asking yourself questions about the topic, such as…*

Need to Narrow? Ask These...

- ❑ *What do I find interesting about the topic?*
- ❑ *What might I find useful to learn?*
- ❑ *What personal experiences have I had that relate to some aspect of the topic?*
- ❑ *What misconceptions do people have about the topic that I'd like to clarify?*
- ❑ *What myths exist about the topic that I'd like to dispel?*
- ❑ *What would I like to learn more about with regard to this topic?*

Asking the questions will lead to...

☐ *The narrowing and focusing of the topic*

☐ *The creation of a thesis statement, which becomes the backbone of your paper*

☐ *From the thesis statement, you can generate keywords*

☐ *Keywords are the most important parts of your thesis statement and are what you use to conduct searches when looking for resources*

Keywords

☐ *Keyword searching is how you're going to conduct most of your searching.*

☐ *Keyword searching is the combination of keywords (get it?) with operators (AND, OR, and NOT) to produce search strings*

☐ *Remember, keywords will come from your thesis statement, but you ought to include related words and concepts as well*

☐ *When using phrases – like Lactic acid bacteria – you need to put the phrase in quotation marks:*

**Lactic Acid Bacteria, Uses, Applications, Production**

Brainstorming

- Generating a list of keywords is also a means of *brainstorming about topics*

- There are different ways, one can brainstorm, though; these other ways *can also generate keywords* for you to use in your search

- If you're more visually-oriented, *don't be afraid to draw or use more visual methods* of brainstorming

- You can use *research diaries or logs* to help you organize your thoughts

What are scholarly resources?

- ❑ *Written by experts*
- ❑ *Review Articles*
- ❑ *Original Research*
- ❑ *Focus on a particular field, topic, or discipline*
- ❑ *Intended for others in that field or career*
- ❑ *"Proper" language, technical vocabulary*
- ❑ *No advertisements*
- ❑ *News reports supported by original findings*
- ❑ *RESEARCH ORIENTED*

Journals are scholarly
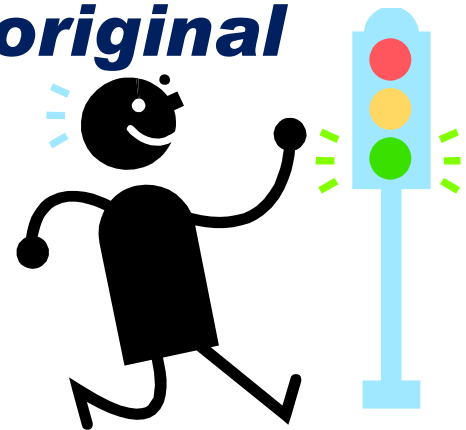
POPULAR resources are the opposite

- ◉ *Written by journalists*
- ◉ *Usually cover broad topics, fields, issues, or disciplines*
- ◉ *Usually appeal to a wide audience*
- ◉ *NOT RESEARCH ORIENTED*
- • *Magazines and newspapers are popular for research in*

Humanities & Social Sciences
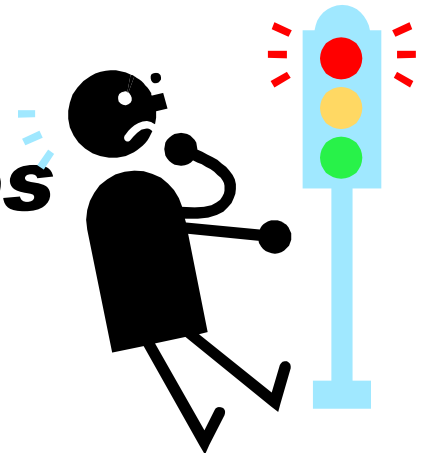
Using the Internet for Research

- *How your first impulse might be to go to the Internet, but how that's not a great idea?*

- *Internet is NOT moderated or quality-controlled, and there's a lot of GARBAGE and RUMOR and outright MISINFORMATION floating around.*

- *Internet does have a LOT of GOOD information, too, BUT lot of unreliable and wrong too*

Using the Internet for Research

Sometimes it's not so easy to tell if a website is appropriate for research or not, because remember: not everything is appropriate for research

- But there are ways to tell if a website is appropriate for research or not

- When using the Internet for research, use the following criteria to determine if a website is good for research or not – taking the time to evaluate websites will help you obtain GOOD resources

Evaluating Websites for Research

☐ *Authority*--who created the web page? Are they experts? What are their credentials? Do they provide contact information?

☐ *Accuracy*--where did they get their information? Are the facts verifiable through another source? Do they list a bibliography of citations from where they obtained their information?

☐ *Objectivity*--does the site have biases? Is the information presented in such a way to allow the viewer to make his|her own judgment, or does the site try to persuade you to adopt its viewpoint? What is the purpose of the site? ***

☐ *Currency*--when was the site last updated? Are the facts on the site up-to-date? Is the information current?

☐ *Coverage*--how much of the topic does the resource cover? Does it attempt to cover all or most of the aspects, or is it vague?

During the Search

- *__Organization__ is very important – keeping your resources organized means you can lay hands on what you need in an efficient way*
  - *Invest in some folders – pocket folders, manila folders, 3-ring binders, whatever you like!*
  - *Where possible, email yourself copies of the things you print off*
  - *Where possible, save copies of the things you print off to a jump drive or a cloud service (like Google Drive)*
- *That research diary sheet we saw earlier would be appropriate at this stage*

After the Searching's Done...

☐ *You have the resources you need, either digitally or physically, if you've printed them out*

☐ *This is when <u>underlining</u> and/or highlighting come into play, as well as notes and sticky notes*

☐ *Documentation is also important, in order to avoid plagiarism – several of databases will generate citations for you*

After the Searching's Done...

☐ *Note-taking on your resources can help you* *focus on the important parts of the resource* *and exclude or ignore the stuff that's not relevant – it's* *filtering*

☐ *It'll* *save you time**, too – making note of what's useful or relevant can save you from having to read the article again and again to find the good bits*

☐ *Note-taking can also* *help you begin to formulate how to express or include information* *from the resource in your own writing*

STUDENT NAME _____

Research note sheet

You will take notes from your sources on this sheet, one sheet for each source. It is **NOT** necessary to attach printed copies of the article or website Get the information on the article itself from the database or website, and fill in the blanks below. I should be able to locate your source from the information provided below. These sheets will also help you compile your Works Cited page and assist you with selection of research material to be documented in the text. I strongly encourage you to create a personal ▮▮▮▮▮ folder to keep your database articles in, and bookmark the websites.

Author_____
Title of the work (quotation marks)_____
Name of Journal (Italicized)_____
Volume, Issue number _____
(Date of publication)_____
Pages_____
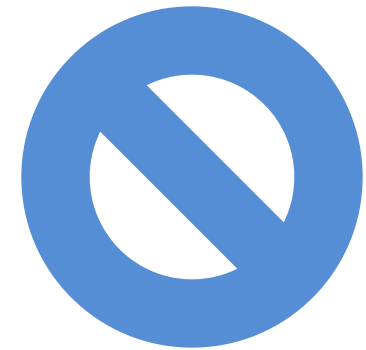Name of database (italics)_____
Date of Access _____

Usable statistics	Usable quotes	Paraphrases

This research diary could be easily adapted and used for books and websites as well – any resource you end up using for your research!

RECAP

□ *DO create a list of keywords*

□ *DO underline/highlight/bookmark*

□ *DO take notes/sticky notes*

□ *DO get organized*

□ *DON'T multi-task*

□ *DON'T plagiarize*

Question & Answer Time

WHO IS A "LEGAL RESEARCHER?"

A *legal researcher* is often a paralegal or *legal* assistant who examines *legal* history and precedent, often to provide pertinent background information on a case to a lawyer or law firm.

A *legal researcher* is an individual who undertakes in-depth *research* into any aspects of the law in support of a company or individual.

A *legal researcher* is one who is basically responsible for researching cases and anything that can help to win a case

WHAT IS LEGAL RESEARCH?

Legal research is "the process of identifying and retrieving information necessary to support legal decision-making. In its broadest sense, legal research includes each step of a course of action that begins with an analysis of the facts of a problem and concludes with the application and communication of the results of the investigation. (Jacobstein & Mersky)

Legal Research is the process of locating an answer to an unknown legal problem, verifying the law, and reading cases or statutes.

How Legal Research Differs from Research in Other Contexts

- *You need to be:*
  - *Aware of legal materials;*
  - *Familiar with multiple sources and different techniques for each researching various types of problems;*
  - *Able to search for primary authorities, as well as a large range of secondary and tertiary sources; and,*
  - *Make sure that your research is correct, informative and up-to-date.*

What is TARP METHOD?

T	THING or Subject matter, place or property (e.g. divorce, contested will, service dispute, criminal act like theft, forgery, murder etc)
A	Cause of ACTION or ground for defense (e.g. breach of contract, mistaken identity, violation of service rules, violation of principles of natural justice,
R	RELIEF sought or type of suit or Writ (e.g. monetary damages, injuction, Writ of Mandamus, etc.
P	PERSONS or PARTIES involved and their relationship to each other (e.g. husband-wife, employer-employee, landlord-tenant, Private complainant-State)

"FILAC" Approach

- *Facts*
- *Issues*
- *Law*
- *Analysis/Application of law to facts*
- *Communication*

"FILAC" Approach

- *Facts*
- *Issues*
- *Law*
- *Analysis/Application of law to facts*
- *Communication*

Correctly identify the relevant facts – sometimes obvious, sometimes not

But what if I don't know enough about the subject at hand?

"FILAC" Approach

- *Facts*
- *Issues*
- *Law*
- *Analysis/Application of law to facts*
- *Communication*

Identify relevant issues to be researched. These arise from the facts, usually stated in the form of legal questions that the client needs answered.

"FILAC" Approach

- *Facts*
- *Issues*
- *Law*
- *Analysis/Application of law to facts*
- *Communication*

Find the relevant law.
1) Use secondary sources – broad overview.
2) Narrow in on primary sources.

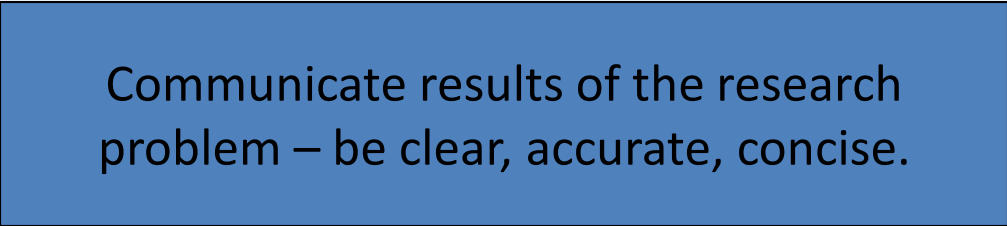# *"FILAC" Approach*

- *Facts*
- *Issues*
- *Law*
- *Analysis|Application of law to facts*
- *Communication*

Apply the relevant law to the facts to analyze the way a judge would decide the matter given the same set of facts.

"*FILAC*" Approach

- *Facts*
- *Issues*
- *Law*
- *Analysis/Application of law to facts*
- *Communication*

Communicate results of the research problem – be clear, accurate, concise.

Some Aspects of Legal Research

* *Identifying the problem (who is the owner?)*

* *Gathering of facts (the name/postcodes)*

* *Analysing those facts (what can we tell from them / how best to use them?)*

* *Identifying research sources (internet)*

* *Finding search terms (name / postcodes)*

* *Locating relevant sources (BT / Multi-map)*

* *Using the sources effectively (narrowing the search)*

* *Applying the findings to the problem (finding the relatives and then the owner)*

Why is Legal Research Important?

LEGAL RESEARCH IS A VITAL SKILL IN PRACTICE

- *Legal problem solving*
- *Practical problem solving*

IMPORTANCE:

1. Research is the lawyer's key skill
2. Effective research takes in every aspect and every stage of the case
3. Not every problem is necessarily a legal problem which need research

What is Practical Legal Research?

- *What do we mean by "practical legal research"*

- *How does this differ from other kinds of research?*

- *Mainly concerned with client problem*

The Problem of Legal Research

…

- ***Thousands of newly decided cases***

- *Identification of problem/areas for research*

- *Key words / phrases*

- *Research Report*

- *Additional information, if required*

- *Summary*

Sources of Legal Research Materials

- ## Primary Authority
  - ### information in its original form
    - Judicial and Administrative decisions, Enacted Legislation, Judicial Pronouncements, Thesis, Official Documents, Views & Interviews; views of Jurists etc.
- ## Secondary Authority- Sources of information that describe or interpret the law, such as legal treatises, law review articles, scholarly legal writings, citations of lawyers used to persuade a court to reach a particular decision in a case, but which the court is not obligated to follow, Dictionary, writings, Books, Compilations, articles; an interpretation of case law and/or Legislation, Reports, Government documents etc. are the examples
- ## Tertiary Authority
  - ### Directories (jurists, journals and Archives) Library catalogue, periodical indexes, search engines, legal gateways/portals, case digests etc.

Some Legal Databases

juris Das Rechtsportal

LexPolonica
Serwis Prawniczy

LexisNexis
jurisclasseur

BANCHE DATI EDITORIALI GIUFFRÈ | DeJure

v|lex

THOMSON REUTERS
WESTLAW

Paper vs. Electronic Research

- *Advantages & Disadvantages*

- *Both necessary in present day legal and practical research*
- *Why you'll need both*
- *When to use each method*

Types of Legal Research

- ## *Research done by a legal scholar*
  - – *Usually directed toward general conclusions*
  - – *Broad/exhaustive searches*
  - – *Attempt to find and discuss all relevant material*
  - – *End result: a critical piece of work*

- ## *Research done by a lawyer*
  - – *Attempt to find and apply legal authority relevant to the precise question of client*
  - – *More narrowly focused*
  - – *Deadline-driven*
  - – *End result: a specific legal document, e.g. memorandum of law*

Example question

Your supervisor is dealing with a matter of intellectual property. The lay client is intending to establish a small company to buy up patents on inventions that have been on the market for some years and then re-market those inventions to profit from re-vitalising their sales.

Following general & specific points require research.

How long does a patent last?

Are sections 46-49 of the Patents Act 1949 still in force? and

Is it possible for a patent to be used either now or in future under ss 46-49 of the Patents Act 1949?

THE ORDER OF RESEARCH

First: Determine the nature of the inquiry

Patents example: identification of problem/areas of research:

- *Currency of legislation dealing with the grant of patents.*

- *The duration of patents granted under effective legislation.*

Second: Identification of key words

Key words/phrases:

Intellectual property, patent(s), ss 46-49 of the Patents Act 1949, possible for patents to be used now or in the future

contd....

- **Third: The Research Report**

1. *The report must accurately contain the findings or answers to the questions you have posed*

2. *It must state the authority for the answers*

3. *It must show from where the information was obtained using full and proper citation of cases and legislation and the accepted conventions on academic sources.*

Research Report - example

First - How long does a patent last?

Patents granted on applications made on or before 31st May 1967 had a term of sixteen years (s22 Patents Act 1949) but could be extended by up to a maximum of four years.

Patents granted on applications made after 31st May 1967 had a term of twenty years from the date of filing.

Patents granted under the Patents Act 1977 are of one type with a term of twenty years from the date of filing.

Contd.....

Second- Are ss 46 - 49 of the Patents Act 1949 still in force?

The Patents Act 1949 now applies only to "old patents", a term used to denote letters patent granted and applications made under the Patents Act, 1949.

Sections 46 - 49 of the Patents Act 1949 are part of the general provisions relating to patents after grant and are still in force.

The Patents Act 1949 was replaced by the Patents Act 1977 in respect of patents granted on applications filed on or after 1st June 1978.

Thus, no application for a patent could be made under the Patents Act 1949 on or after 1st June 1978.

Given that the term of patents granted on applications made after 31st May 1967 was twenty years, ss 46-49 of the Patents Act 1949 ceased to have effect on 31st May 1998 (see: Halsbury's Laws - 35 - 306 n7).

Contd...

Third- Is it possible for a patent to be used either now or in the future under ss46-49 of the Patents Act 1949?

The Patents Act 1977, for the purposes of dealing with the term of old patents, distinguishes between "old existing patents" and "new existing patents" both of which phrases refer to patents granted under the 1949 Patents Act.

An "old existing patent" means an old patent dated before 1 June 1967 (see s127(2) of the Patents Act 1977).

A "new existing patent" means an old patent that is not an "old existing patent" (see Sch 1 para 3(1)(b) of the Patents Act 1977).

Again, since the term of patents granted under the Patents Act 1949 was a maximum of twenty years from the date of filing, no old patents of either type now exist and all patents fall to be dealt with under the Patents Act 1977.

Fourth: Additional Information

This section is used to note any information that is needed in order to answer the question properly: here there was none so we entered: none.

Fifth: summary

Patents granted under the Patents Act 1977 have a term of twenty years from the date of filing.

Sections 46 - 49 of the Patents Act 1949 are still in force but no application for a patent could be made under the Patents Act 1949 on or after 1st June 1978.

The term of patents granted under the Patents Act 1949 was a maximum of twenty years and so no patents granted under the 1949 Act now exist.

Sixth: Identify Sources

Primary Sources:

Patents Act 1977, s127(2) and Schedule 1 para 3(1)(b) - definitions of "old existing patent" and "new existing patent".

Secondary Sources:

Halsburys Laws Volume 35 paras 306 – 345 note 7 - "patents" and "grant of term" provide detailed background information to the relevant Acts and the term of patents granted under the Acts and the effect of the 1977 Act.

Seventh: Updating

Checked Cumulative supplement to Halsbury's Statutes and also Cumulative Supplement to Halsbury's Laws and Noter Up. No changes of relevance.

(How you achieve this depends on the source. Case law – depends on the case law series – can check other sources like current law which is the most comprehensive Statute – Halsbury's Statutes uses current service and noter up).

Further Problems

- *Scope:* check the prefatory editorial content of a source e.g. is it a partial or comprehensive treatment of the topic

- *Currency:* (vital) you must know

  1. Which source is most current?
  2. How is the source updated?
  3. At what date are you operating in your research.

Things you can do to help yourself

First important thing: become familiar with where and what the sources are and how to use them.

Sources include:

- *Paper sources*
- *Electronic sources*
- *People*

Paper sources - examples

Legal Encyclopaedia e.g. Halsbury's Laws of England; India

Halsbury's Statutes and SIs

Case reports

Current Law

Practitioner Texts

Legal Dictionaries

Electronic sources - examples

Current Law

Westlaw UK

Lexis-Nexis

All England Reports and Case Search

Lawteller

Live Law

Law Octopus

Other things to consider e.g. Authority?

see e.g. Practice Direction (Supreme Court) [1998] 1 WLR 825:

The Law Reports
Weekly Law Reports
All England Law Reports
All India Reports
Supreme Court Cases
All India Reporter
Other authoritative series

REMEMBER

MAKE SURE THAT YOUR

RESEARCH IS:

THOROUGH

RELEVANT

ACCURATE

UP-TO-DATE

PROPERLY REFERENCED

PROPERLY WRITTEN

The Four C's of good legal research:

C *orrect*

omprehensive

redible

ost-effective

When can I stop researching?

- *When you have completed the steps in the legal research model you're using*

- *When you have used a variety of appropriate sources*

- *When you are finding the same authorities over and over again*

- *When cost exceeds benefit, i.e. you run out of time*

Summary

- *Legal research...*
  - *Can be done in print and/or online*
  - *Is not linear or necessarily straightforward*
  - *Requires an awareness of what primary & secondary materials are and where they can be found*
  - *Can be frustrating and tedious at times*
  - *Require good knowledge of computer and internet working*
  - *Requires patience and practice*

Critical Thinking

Imagination and Creativity
Logic and Reasoning
Conceptual Thinking
Reflection and Feedback

Problem Solving

Imagination and Creativity
Logic and Reasoning
Data Collection
Conceptual Thinking
Reflection and Feedback
Scientific Experimentation

Research Skills

Analysis

Data Collection
Data Analysis
Reflection and Feedback
Scientific Experimentation

Dissemination

Imagination and Creativity
Logic and Reasoning
Conceptual Thinking
Reflection and Feedback