



# Literature Reviews and Search Strategies



**Margaret Rooney**  
**Subject Librarian : Natural Sciences**  
**[mjrooney@tcd.ie](mailto:mjrooney@tcd.ie)**



# Session overview

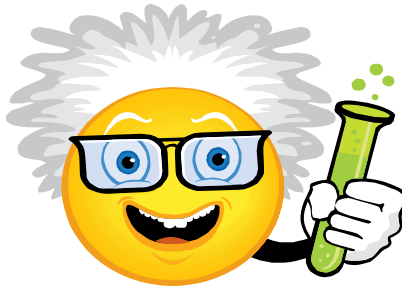
- ✓ What is a literature review?
- ✓ How to formulate a search strategy
- ✓ Identifying resources
- ✓ Utilising resources effectively

What is a literature review?



# Literature Reviews

- **Reviews have always been part of Scientific Literature**



- **Experts have always sought to collate existing knowledge and publish summaries on specific topics.**

# What is a Literature Review ?



**A literature review is a critical, in-depth evaluation of research already undertaken on a specific topic by accredited scholars and researchers.**



# What a literature review is

- **A literature review surveys scholarly articles, books and other sources (e.g. dissertations, conference proceedings) relevant to a particular issue, area of research or theory.**
- **It provides a description, summary and critical evaluation of each work.**
- **It's overall purpose is to provide a critical evaluation of significant literature published on a topic.**

# What it is not



**N.B. A literature review itself, does not present any new primary scholarship**



# Purpose of a literature review

- **Assess the contribution of existing literature to the subject under review.**
- **Allows you to demonstrate your ability to identify relevant information and to outline existing knowledge.**
- **Allows you to identify any gap in the research thereby providing a rationale for your own.**

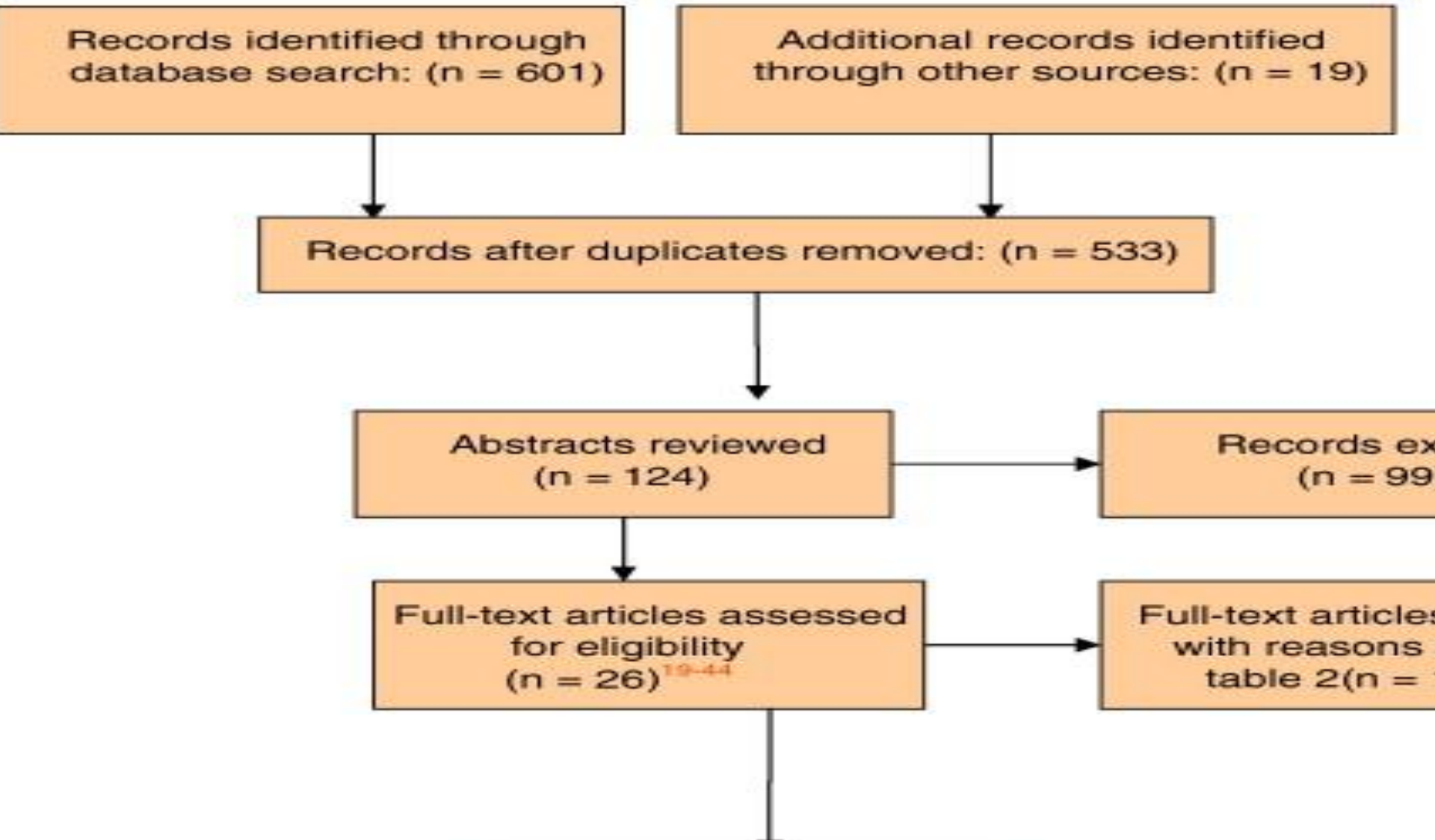




# What is a systematic literature review?

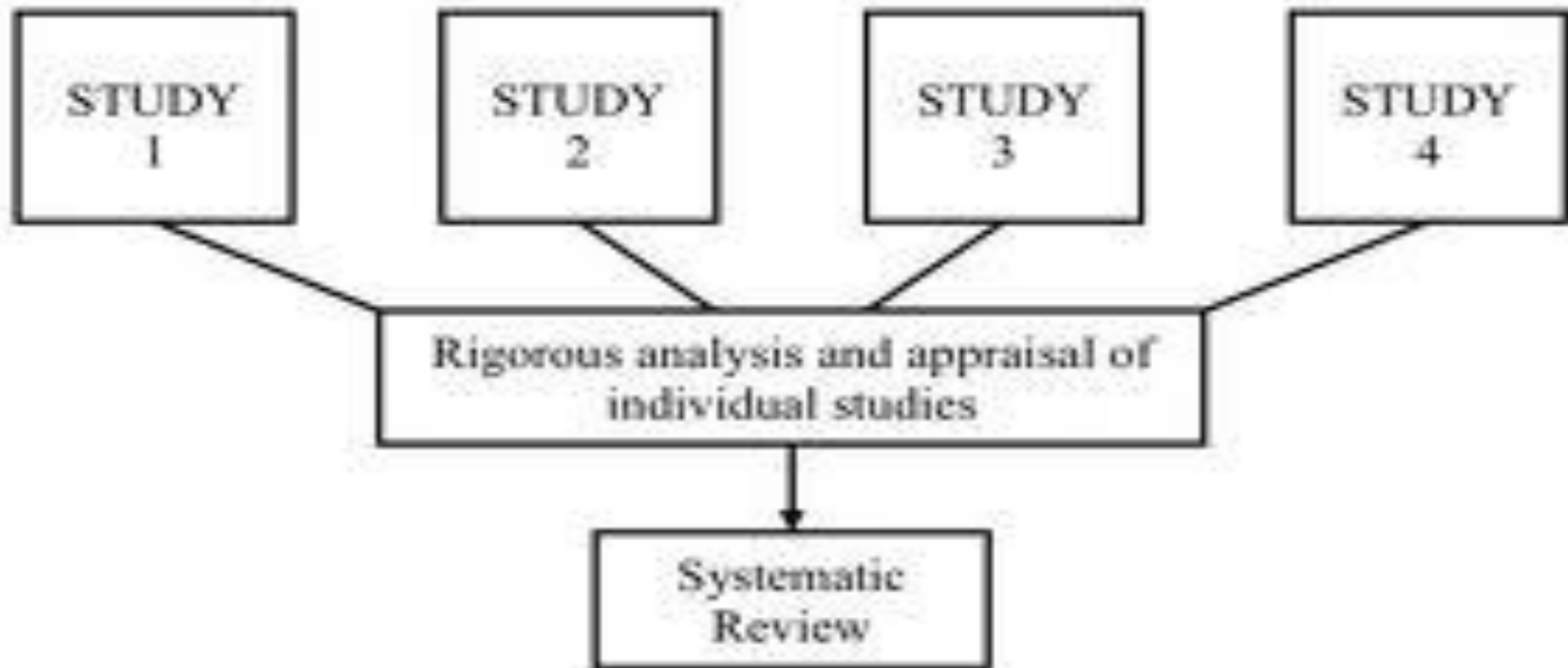
- A clearly formulated question
- Definition of methods that will be used to perform the review.
- Defined search strategy to identify all available research data relevant to a particular research question.
- Evaluates, appraises, selects and synthesizes the data by use of explicit methodology

# Systematic Review Process



# Systematic Reviews

Includes both published and unpublished studies



# Why is it important to be systematic?

- Summarises existing knowledge on topic effectively
- Peer reviewed protocol to establish
  - search strategy
  - selection criteria for resources to be included /excluded
- Findings can be replicated.



# Famous Case

- **Single** research paper published in 1998, based on **12 children** suggested mmr vaccine could cause Autism
- Worldwide scare – reduced uptake of vaccine, potentially very serious consequences for public health.
- Definitive systematic review by Demicheli et al disputed these findings.
- Example of where a systematic review helped clarify a vital public health issue.



# Systematic Review

- Well defined methodology means results are less likely to be biased.
- If studies give consistent results systematic reviews provide evidence phenomenon is robust and transferable.
- Most needed when there is a substantive question and several primary studies.

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## How to formulate a search strategy



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# Decisions Decisions

**Prior to searching any resource, look at your topic and decide :**



- 1. What are the component issues?**
- 2. What are the primary keywords / phrases in my topic ?**
- 3. What alternative keywords or synonyms represent each of these key topics?**



# Remember



Remember, a well defined research question is central to an effective search strategy.

# Ask yourself

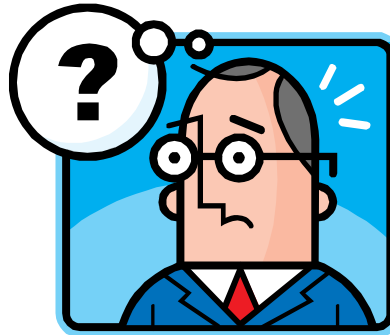
Is your research question?

- Specific -
- Focused -
- Clearly formulated -
- Well defined -



# Stages of a literature review

## Problem formulation



What do you need to find out ?

What are the component issues?

# Decide your keywords

## Keywords



**A list of primary keywords (incl synonyms)**

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## Identifying resources



# Where to Start?

## Literature Search



**What resources do you need to consult?**



# How do you identify all potential data?

- **Search multiple bibliographic databases**
- **Scan bibliographies of existing reviews and eligible studies**
- **Scan conference proceedings**
- **Hand search key journals**
- **Forward citation search of seminal articles (WoS)**
- **Contact scholars working in the area**
- **Search Internet**

# Assessment of literature

- **Provenance** - What are the author's credentials?
- Are the **arguments** supported by **evidence** (e.g. primary historical material, case studies, narratives, statistics, recent scientific findings)
- **Objectivity** – is author's perspective even-handed?
- **Value** - Are the arguments and conclusions convincing?  
Does the work contribute in any significant way to an understanding of the subject?



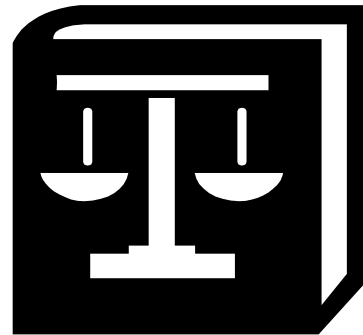
# Top 5 Science Journals (Impact Factor)

1. **Nature**
2. **New England Journal of Medicine**
3. **Science**
4. **The Lancet**
5. **Cell**



# Evaluating the literature

## Analysis & Interpretation



**Evaluate findings and conclusions of pertinent literature.**

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## Utilising resources effectively



# Search Techniques

## How to

- Understand how searches work in a dat
- Create a broad or narrow search
- Maximise relevant results



# Database Searching

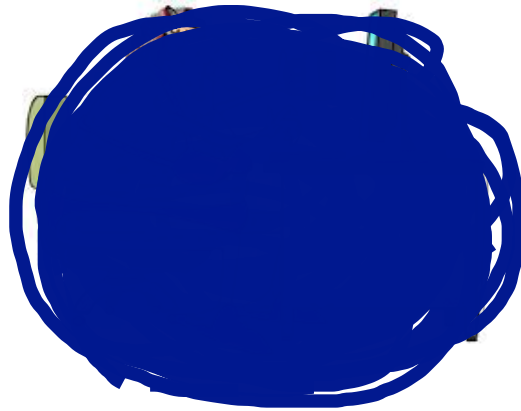


**DATABASES**

are like scuba diving: They let you get deeper.

# Searching Databases

200+ bibliographic, journal and e-book databases



Are listed by **name** and **subject** on library website

Identify databases relevant to your subject area

# Database Searching

**Using PubMed as an example**





# Database Searching

## PubMed

- PubMed comprises more than 23 million citations for biomedical literature from MEDLINE, life science journals, and online books.
- Citations may include links to full-text content from PubMed Central and publisher web sites.



# Controlled Vocabulary

**To facilitate search retrieval by eliminating (or accounting for) the use of variant terminology for the same concept.**



# Controlled Vocabulary

## MeSH

**MeSH (Medical Subject Headings)** is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed.



For example when searching for **German Measles** it recommends you use the term **Rubella**.



# Boolean Operators

**AND**

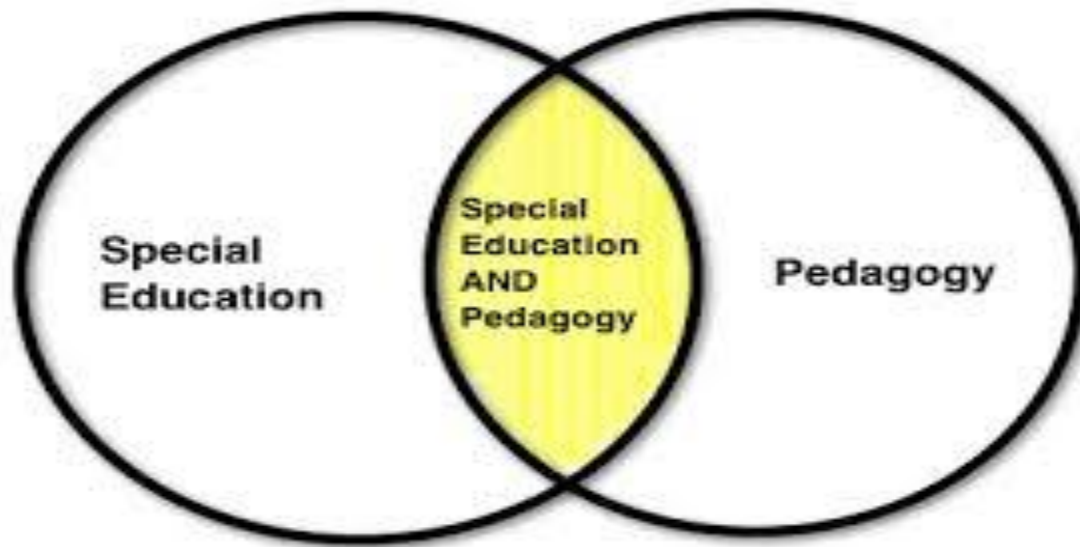
**OR**

**NOT**

**These three Boolean operators allow you to combine terms to narrow or broaden your search.**

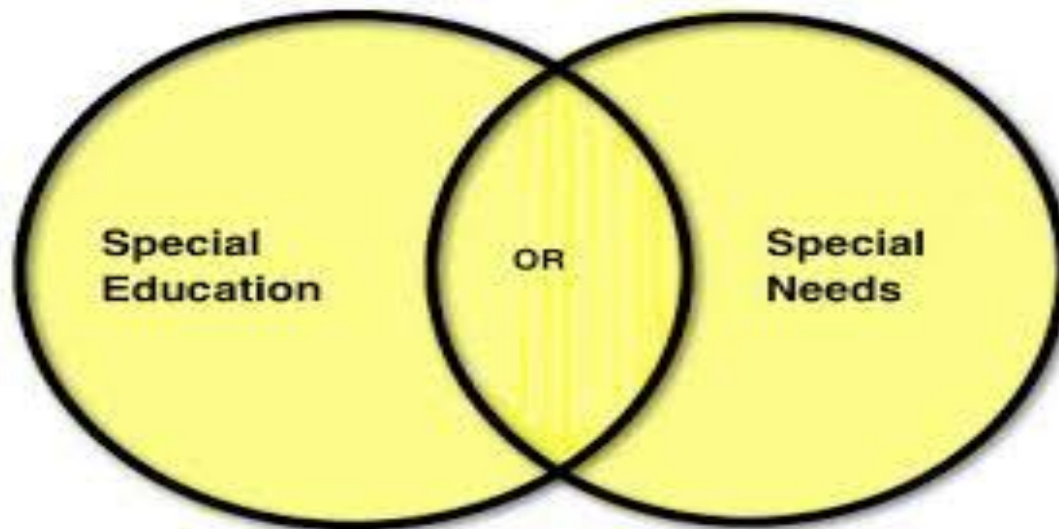
# Boolean Operators

**AND** - **narrows** (combines)



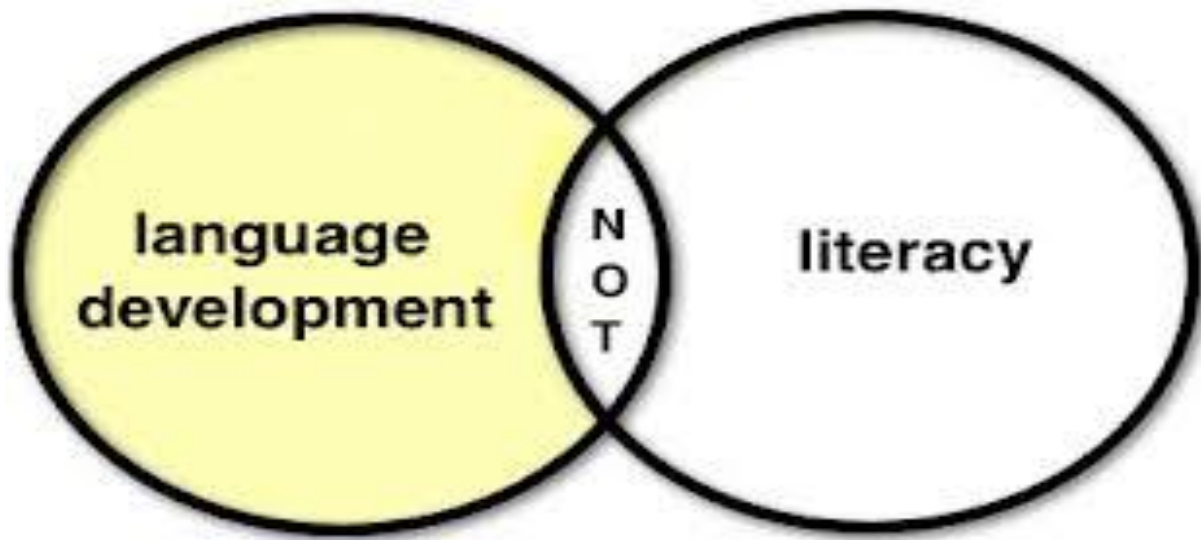
# Boolean Operators

OR - **broadens** (either /or)



# Boolean Operators

NOT- **narrows** (excludes)



# Tips to narrow search

## To narrow

- Combine by using **And** operator
- Phrase Searching

Limit your search by

- language
- date range
- type of publication etc.

## Example

- ✓ “drug addiction” **AND** teenager, english language only

# Tips to broaden search

## To Broaden



- Use the operator **Or**
- Remove some search terms, or use more general terms
- Truncate your search term
- Think of alternative spellings
- Wild card operators



# Search Techniques

## Examples

- “back pain” **OR** “back ache”
- **Truncation** : = therap\* ;therapy; therapies; therapeutic; therapeutics;
- Organisation or organizzation, connecction or connexion, defence or defense, theatre or theater
- Wildcard operator behavio?r = behaviour or behavior



# EXAMPLE

**What causes some children to be bullies?**

What causes some children to be bullies?

- **Decide keywords**
- **Look at synonyms**
  - **Truncation**
- **Combine Terms**

# Help Available



- Always useful to check out the help section on the database
- Will tell you what wildcard and truncation symbols are
- Give sample searches.

# Elements of a literature review

- **Overview of the topic**
- **Objectives of the review itself.**
- **Categorise positions taken – in favour, against and alternative viewpoints**
- **Compare and contrast them.**
- **Which arguments are the most convincing and why?**



# Library Catalogue

- **Stella Catalogue** – works like a search engine – shows entries with search terms weighted by relevance
- **Classic Catalogue** - A-Z index

Coverage same in both

# Trinity College Catalogues

- **Stella**
- **Classic**
- **Accessions (1872-1964)**  
(80% of this catalogue also in Stella/Classic)
- **1872 Catalogue online (pre 1872)**
- **Marloc – 20,000 manuscripts & archives from 13 C**
- **Digital Collections - books, maps, paintings, manuscripts & photographs.**



# Database providers linked to Stella

- **EBSCO**
- **JSTOR**
- **ProQuest**
  - **ISI**

**Chosen for multidisciplinary coverage**

# ebSCO



New Service

EBSCO Support

UNITY COLLEGE DUBLIN (UNIVERSITY)



Access all resources  
Academic Search Premier  
AMED



Business Source Premier - with Business Searching Interface



CINAHL & Pre CINAHL  
ECONLIT and ECONLIT with Full Text  
Historical Abstracts  
PsycARTICLES & PsycINFO  
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# JSTOR

- **Area Studies (586 titles)**
- **Arts (1548 titles)**
- **Business & Economics (1924 titles)**
- **History (7510 titles)**
- **Humanities (7725 titles)**
- **Law (785 titles)**
- **Medicine & Allied Health (579 titles)**
- **Science & Maths (2731 titles)**
- **Social Sciences (10592 titles)**



# ProQuest

- **Dissertation & Theses**
- **Historical Newspapers**
  - Guardian (1821-2003)
  - Observer (1791 – 2003)
  - Irish Times (1859 – 2007)
  - Times of India (1838- 2007)
- **ProQuest Nursing & Allied Health Source**



# ISI

- **Science Citation Index (1945-)**
- **Social Science Citation Index (1956-)**
  - **Arts & Humanities (1975-)**

**Access to current & retrospective information from approximately 8,700 research journals.**

# Library Website

- **Library catalogues**
- **Library e-resources (books, journals & databases)**
- **Subject Guides**



**[www.tcd.ie/Library](http://www.tcd.ie/Library)**

**\* Can be accessed off campus**

# Trinity & Beyond

- **Inter-library loans**

## **Other Libraries**

- **ALCID Card**
- **Letters of Introduction**
- **MusicPAL**





# ALCID Card

## **ALCID Research Card**

**ACADEMIC LIBRARIES CO-OPERATING IN IRELAND**

**ALCID Scheme is open to Masters and Doctoral Students  
Home Institution - *TCD***

Name:

.....

ID Number:

.....

Signature:

.....

Valid Until

September 30th 2014

**This card is only valid with Institutional/Library ID**

See reverse for details of participating libraries



# Participating Institutions

This card gives admission without borrowing rights to the libraries of DCU, TCD, UCD, NUI Maynooth, Royal College of Surgeons in Ireland, Royal Irish Academy, Mater Dei Institute, St. Patrick's College Drumcondra, UL, NUI Galway, UCC, DIT, Mary Immaculate College, St. Angela's College Sligo, NCAD, DIAS and University of Ulster.

*It is advised that your first visit should be during office hours.*

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 [Early Printed Books](#) | 
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## Berkeley Lecky Ussher

Hilary and Trinity Terms: Thursday 2 January 2014 - Saturday 24 May 2014

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
<b>Opening Hours</b>	09:00 - 22:00	09:00 - 22:00	09:00 - 22:00	09:00 - 22:00	09:00 - 22:00	09:30 - 16:00	TBA
<b>Admissions Counter</b>	10:00 - 16:00	10:00 - 16:00	10:00 - 16:00	10:00 - 16:00	10:00 - 16:00	09:30 - 12:45	Closed
<b>Service Counter</b>	09:30 - 19:45	09:30 - 19:45	09:30 - 19:45	09:30 - 19:45	09:30 - 16:45	09:30 - 15:45	TBA
<b>Duty Librarian's Desk</b>	10:00 - 12:30 & 14:00 - 19.45	10:00 - 12:30 & 14:00 - 19.45	10:00 - 12:30 & 14:00 - 19.45	10:00 - 12:30 & 14:00 - 19.45*	10:00 - 12:30 & 14:00 - 19.45	09:30 - 13:00	Closed

### All Libraries Closed:

St. Patrick's Day: Monday 17 March 2014

Easter: Friday 18 April - Monday 21 April 2014

May Bank Holiday: Monday 5 May 2014

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## Opening Hours

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# Further Support:



- **Find out who your subject Librarian is**
  - **Duty Librarian service**
    - **Library website.**