

## Information literacy skills

Skills required to be information literate require an understanding of:

- A need for information
- The resources available
- How to find information
- The need to evaluate results
- How to work with or exploit results
- Ethics and responsibility of use
- How to communicate or share your findings
- How to manage your findings

#### A need for information

Recognising that information is needed; understanding why information is needed, what (and how much; what kind of) information is required, as well as any associated constraints (e.g. time, format, currency, access); recognising that information is available in a wide range of formats in various geographical and virtual locations. The ability to articulate a question and so develop a focus for research is an important skill.

**Note:** Information may be available on paper, digitally, through other media such as broadcast or film, or from a colleague or friend. It may or may not be conveniently close to hand and easily accessible, and quantifying your need and making a decision about the use of an information source may be tempered by the ease and speed with which an answer can be obtained.

## **Understanding availability**

Be able to identify what resources are available for exploitation, where they are, how to access them, the merits of individual resource types, and when it is appropriate to use them.

**Note:** As suggested, this requires an understanding of types of resource (paper-based, electronic/ digital, human etc) and when to use each; what are the merits of individual resources types; what are the differences between them.

#### **Examples**

- A journal article may be available in print, as a part of an e-journal or as a record in a database of full-text articles
- Not all search engines offer the same facilities
- A company website, a market research report, or the website of a national statistical organisation may offer differing views

Access channels to information resources may vary according to who or where you are e.g. for an 8 year old child, availability is subject to having to go through various gatekeepers such as their parents' views or willingness to buy books, the library's filtering policy, access to a computer at home or at their friend's etc. Whether the exact same information sources can be reached by different children depends on the lost channels available to them. Any resources may be subject to cultural, political, industrial, national or other bias. Newspapers and news sites, lobby groups, religious groups/ sects.

## Understanding how to find information

An ability to search appropriate resources effectively and identify relevant information.

**Note:** Strategies need to be tailored to the resource being used, so as to get the best results from that resource. Users need to respond to search results - possibly because there are too many – and know when to stop searching. An information literate person would also understand that, in addition to purposive searching, information can be acquired by browsing, scanning and monitoring information sources.

#### **Examples**

- Searching across several resources
- Using back-of-book indexes
- Using abstracting and indexing journals
- Scanning RSS and news feeds
- · Participating in e-mail, discussion lists, Bulletin boards, etc
- Using hypertext, URL's, bookmarks, etc.
- Understanding and using Boolean logic
- Understanding and using truncation
- Understanding and using fielded data
- De-duplicating search results
- Understanding and using relevance and relevance-ranked searching

## Understand the need to evaluate results

Be able to evaluate information for its authenticity, accuracy, currency, value and bias. Also, be able to evaluate the means by which the results were obtained in order to ensure that your approach did not produce misleading or incomplete results.

**Note:** This is not just whether the resources appear to answer the question, but whether it is intrinsically trustworthy.

#### **Examples**

Use prior knowledge of author, editor, series, publisher

#### Examine:

- Relevance to problem/question/task in hand
- Appropriateness of style for users
- Availability of index, notes, bibliography, illustrations, multimedia, etc
- Authenticity and origin
- Authority (ownership, reputation, coverage, scope)
- Bias or point of view
- Error rate/accuracy
- Purpose/audience
- Currency/timeliness
- Consistency
- Design (output, presentation and arrangement)
- Organisation/navigation (ease of use)
- Access and use (documentation, accessibility, comparison with other sources)

## **Understand how to work with or exploit results**

Analyse and work with the information to provide accurate, presentable research results, or to develop new knowledge and understanding.

**Note:** To understand, compare, combine, annotate, and apply (use) the information found. Recognise and understand a possible need for further information searching.

## **Examples**

 Use of appropriate software (spreadsheet / database / statistical / reference management / etc)

#### **Understand ethics and responsibility of use**

Know why information should be used in a responsible, culturally sensitive and ethical (professional, business, personal ethics) manner. Respect confidentiality and always give credit to other people's work. Understand the nature and uses of bias, in order to report appropriately. Where appropriate, provide a balanced (unbiased) report.

**Note:** This could include issues of intellectual property, plagiarism, unfair practice, fair use, freedom of information, data protection, codes of practice and ethical principles as set out by your employers, institution or professional body (e.g. CILIP).

**Examples** CILIP's Ethical Principles and Code of Professional Practice for Library and Information Professionals

# Understand how to communicate or share your findings

The ability to communicate/share information in a manner or format that is appropriate to the information, the intended audience and situation

**Note:** This goes beyond analysis to the synthesis, organisation and/or creation of further information in an appropriate form.

## **Examples**

- Understanding of the advantages and disadvantages of different communications channels (e.g. web page, presentation, written report)
- Participating effectively in collaborative writing and publication, including use of collaborative software (e.g. student group report; internal knowledge base; collaborative blog; wikipedia)
- Understanding of appropriate writing styles (e.g. for reports, essays, presentation, etc)
- Knowledge of citation style
- Use of footnotes/end notes
- Use of a succinct and easily understood style when reporting findings verbally
- Use of appropriate style and understanding of conventions when using email

## **Understand how to manage your findings**

Know how to store and manage the information you have acquired using the most effective methods available. Reflect critically on the process and achievement as well as on the sources found in order to learn from the experience of finding and using information.

**Note:** Continual or ongoing management for yourself and/or others.

#### **Examples**

- Consideration of re-finding resources (either locally or in the original) at a later date
- Use of, and relocation in, filing cabinets and/or shelves for physical resources
- Use of folders to organise computer-stored data
- Organisation of email and email attachments
- Use of appropriate software (spreadsheet/database/statistical/reference management etc)
- Security and backup copies
- Tracking changes in documents
- Personal content management

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