

SEARCHING AND EVALUATING RETURNS

SCENARIO 1



Original materials created on behalf of the Education and Training Foundation
and funded by the Department for education

-
- 01 CONTENTS
 - 02 INTRODUCTION
 - 03 MAKING EXCELLENT SEARCH ENQUIRIES
 - 04 EVALUATING RETURNS
 - 05 SUMMARY
 - 06 EXTENSION
 - 07 FURTHER RESOURCES
 - 08 APPENDICES

Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Refers to Modules:

Finding and evaluating information

Relates to Standards:

Finding and evaluating information

Developing digital skills (Level 1)



Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

The Cloud contains everything that has been remembered relating to humans that individuals have chosen to share or simply keep for personal recollection and pleasure. Unless content is hidden for reasons of privacy, it can be accessed by others.

Finding resources is dependent on the terms of the search. Searches will only return content based on the quality of the search parameters given in the first place.

It follows that to make the most of using content in the Cloud, relies on two skills:

1. Making excellent search enquiries in the first place.
2. Evaluating and choosing what to take from what is found.



TEACHING TIP

This module deals with using technology to find things out that can be relied on sufficiently to be useful to the searcher.

The use of the word returns in the title emphasises the relationship between what is asked of the Cloud and what it will subsequently return.

How we search is as important as what we do with what is found.

Scenario 1

Making excellent search enquiries

General or specific searches?

Whilst it might seem logical to think that the more accurate a search is the better the returns, serendipity can be an effective search technique. A more general enquiry may need some sifting through but can turn up thoughts and approaches not thought of and may lead to lines of enquiry that leads to better understanding.

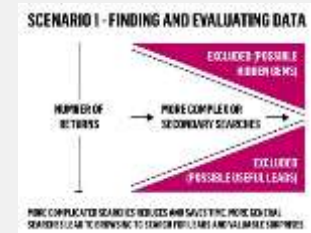
1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

TEACHING TIP

Successful searching is dependent on:

- **Knowing what is wanted**
- **Being clear at the outset what the stating position of knowledge is**
- **Knowing how much time can be given to searching and ow much to browsing.**

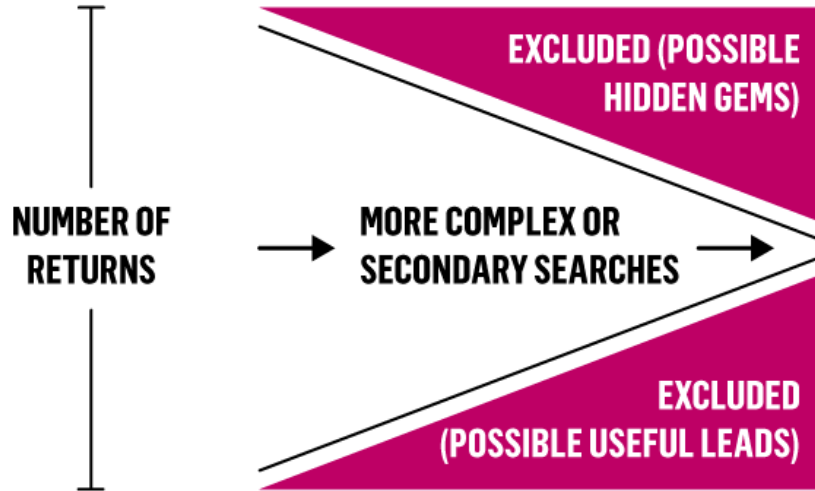
Use the diagram below to illustrate this relationship (select the image to see a larger version on the following slide).



Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

SCENARIO 1 - FINDING AND EVALUATING DATA



MORE COMPLICATED SEARCHES REDUCES AND SAVES TIME. MORE GENERAL SEARCHES LEAD TO BROWSING TO SEARCH FOR LEADS AND VALUABLE SURPRISES.

Scenario 1

Users may think that searches must be very specific, but what if a user does not know what is available or simply wants a general overview?

It follows that an effective search is not limited to tight or narrow wording but the right kind of wording depending on the task and purpose of the search. General searches produce general returns and specific ones produce tighter but fewer ones.

Rather than be specific, users can be as general as they wish, accepting that the returns will need a good deal of sifting through to find anything of value.

- Sometimes this approach turns up the unexpected
- Sometimes finding what is not wanted, helps improve the terms used to search
- A general search gives an indication of the range and reach of information on a subject.



1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Boolean searching

How searches are worded provides for a widening of information of the topic or a narrowing.

- Broadening a search requires fewer and more general terms to be used.
- Narrowing a search requires more precise terms and words that will form part of the return.
- Boolean terms are used in capitals, for example, AND or OR.



TEACHING TIP

Different Browsers may follow slightly different conventions and a search on Boolean for each browser to get an accurate set might be advisable.

Scenario 1

Learning activity:

Show by projection to a whiteboard a general search and then how to narrow the search using progressive steps.

Ask learners to discuss how returns were generated by the terms used for the search.

Invite learners to experiment with different Boolean options (Level 1), for example:

- 'Hamilton'
- 'Hamilton Academical'
- 'Hamilton AND Scotland'
- 'Hamilton AND founding fathers'
- 'Hamilton IMAGES'
- Scotland OR Academicals NOT founding fathers
- 'Hamilton AND founding fathers AND IMAGES'
- 'Hamilton NOT Founding Fathers'

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Browser settings

Depending on which browser is used, each has settings that can be adjusted for preferences. On personal devices these can be set as saved preferences, but this is harder when using a public or desktop computer in a college or organisation. Browser settings help with accessibility.

When searching, it is possible to add filters available in the browser.

They are:

- Sites,
- Images
- Videos
- News
- Maps.

Filters can also be added for:

- Language
- Secure
- Timescales.

Filtering by timescales allows returns to be restricted to those added within a day, week, month, etc. and has a bearing therefore on currency.



1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Learning activity:

1. CONTENTS
2. INTRODUCTION
3. MAKING EXCELLENT SEARCH ENQUIRIES
4. EVALUATING RETURNS

Ask learners to search for (local council) waste collection. Then search for (local council) and complete a secondary search for waste collection within the site. (Entry level)
5. SUMMARY

Discuss with learners why either search route (direct or via the main site) might have advantages. (Level 1)
6. EXTENSION

Demonstrate by projection how the filters affect searches. (Entry level)
7. FURTHER RESOURCES

Ask learners to use filters sometimes in exploring searches. (Level 1)
8. APPENDICES

Scenario 1

Evaluating returns

How might a user know the value to them of the returns following a search?

Learners sometimes are happy to believe that anything found through the Internet is valid and reliable.

In all cases, learners need to complete three checks:

An initial check is made against two headings.

1. **Currency** - is the information found clearly current or is it out of date to the extent that it is not relevant.
2. **Relevancy** - does the return address my needs? How close is it to what I want and is it sufficiently close to be of value to me?

A third test is more challenging which is:

Testing the reliability of a return.

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Testing the reliability of a return

It used to be an undergraduate skill to learn how to judge returns as part of research skills.

School children generally relied on their teachers to tell them what to use and what to avoid. However, with the advent of the Cloud, these skills need to be acquired by anyone who searches the Cloud, regardless of their age and progress through formal education.

Learners need to consider three things when evaluating returns:

1. Testing the credibility of the source/author
2. Testing validity
3. Testing reliability



1. CONTENTS
2. INTRODUCTION
3. MAKING EXCELLENT SEARCH ENQUIRIES
4. EVALUATING RETURNS
5. SUMMARY
6. EXTENSION
7. FURTHER RESOURCES
8. APPENDICES

Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Dissent and challenge are good in learning

It is important to remember that the Cloud will return views and ideas that might challenge learners that are no less valid and reliable than the views that they may more readily accept.

Part of the value of a good education is to learn how to marshal and argue and accommodate new learning.

TEACHING TIP

Remind learners about the notion of 'Bias Confirmation'.

A paper on it is attached in Appendices.

The success of targeted 'fake news' is attributable to it playing to receptive people who accept too readily what conforms to settled views.

Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

The source

Before any return is opened, learners need to check the URL address.

Many returns can be quickly and correctly ruled out as an inappropriate or unhelpful source. The range and number of returns means that not everyone can be checked; it would be too time consuming.

Testing the source

Testing the source is considering the objectivity, and perhaps level of bias, to a given position the source presents.

In all cases, the order of the list by which returns are shown are set by the browser.

Often returns at the top of a list are there because they pay for the privilege. It will be noticeable to learners how returns often start with advertisements (noted by (Ad) added after the page title on the return).

This means that the best results will not necessarily be at the top as the most relevant will be placed further down the order.

TEACHING TIP

For more information on the validity of internet information, view the module of the same name in the EdTech Programme.

Demonstrate the 'Ad' addition to signify an advertisement to learners. Stress to learners the value of scrolling down a list and not just taking the first thing on offer.

Scenario 1

Learning activity:

Show by projection the returns on a search for 'flat earth' (or a topic of your own choosing relevant to the class).

Without opening any pages, ask learners to look at the addresses (sources) and headlines then briefly discuss which are likely to offer good information and which might not.

Learners are being asked to assess addresses and headlines as a means of being sceptical and more discerning. The 'truth' of the subject matter is a red herring.

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Testing Validity

Validity can be generally seen as testing the credibility of the source and rationality of the argument.

Testing Reliability

Reliability can be generally seen as testing the credibility of the idea through being able to repeat it, creating a rule of principle.



1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Learning activity:

Ask learners to open websites chosen by the teacher. (Website chosen to reflect the circumstances of the class).

Ask one group of learners to review the validity list and another to review the reliability list. (Level 1)

Use the document 'Testing validity and reliability' either as a handout or projection to the class board to support a discussion.

Ask each group to lead a discussion on their judgements. Show the returns projected to a whiteboard during the discussion.

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Storing, Marshalling and using returns

Browsers keep a history of the searches for later reference if required.

Addresses can also be copied and pasted into digital scrapbooks, (hyperlinks), references or bibliographies in assignments and onto slides as evidence sources.

Working with and the management of information to support learning is discussed in **Scenario 5 - Communicating and sharing online.**



1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Learning activity:

Show examples, by projection on a whiteboard, the cycle of copying and pasting a URL into a page or slide and how they work as hyperlinks to the content. (Entry level)

Consider an extension activity at Level 1 that shows the use of tinyURL or google as a means of shortening long addresses to more meaningful links.

Provide a URL reference to learners that points at the rules for citing URLs according to Harvard referencing. (Level1)

A suggested general address is:

<https://www.mendeley.com/guides/web-citation-guide>

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Summary

The problem of good searching is knowing how to save time by finding what you want (even if you don't know that at the start of your search) and how you mix and match it in order to make a coherent contribution to learning.

Learning how to make good judgements about the value of what is found as a contribution to learning or other task is achieved by testing the source, validity and reliability.

Keeping a record of useful addresses and referencing them correctly to acknowledge ownership when used are important study and life skills.

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Extension activity

Ask learners to find a website or information on the Cloud that appears to them to be preposterous or hopelessly ill-informed.

Apart from exploring and testing information, it encourages an element of scepticism in learners about how everything found in the Cloud is useful.



TEACHING TIP

Making this exercise a game or competitive can help boost in users

Scenario 1

Further resources

A guide to some simple Boolean searches	https://www.socialtalent.com/blog/recruitment/the-beginners-guide-to-boolean-search-terms
A good guide to using Boolean searches with links to more specific guidance to using Google in particular	https://www.lifewire.com/boolean-search-terms-google-1616810
A full Reference Guide using Harvard referencing from Imperial College London	https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/library/public/harvard.pdf
A tool from Cite this for me (CTME) to correctly reference a website	http://www.citethisforme.com/guides/harvard/how-to-cite-a-website
TinyURL address shortener	https://tinyurl.com
Sniply is an alternative URL shortener	https://snip.ly
Bitty is a third URL shortener	https://bitly.com

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)

Scenario 1

Appendices

Select the links to open the PDFs for the appendices.

[Appendix 1 – Confirmation Bias](#)

[Appendix 2 – Reliability and validity](#)



Original materials created on behalf of the Education and Training Foundation and funded by the Department for education

1. [CONTENTS](#)
2. [INTRODUCTION](#)
3. [MAKING EXCELLENT SEARCH ENQUIRIES](#)
4. [EVALUATING RETURNS](#)
5. [SUMMARY](#)
6. [EXTENSION](#)
7. [FURTHER RESOURCES](#)
8. [APPENDICES](#)