

1 GETTING TO KNOW THE ONLINE WORLD

1.3 EVALUATING ONLINE CONTENT

GOAL

Participants will be able to make reasoned judgements on the quality of information found in websites and databases and develop some awareness of wider online issues that are influencing evaluation of resources.

OBJECTIVES

Participants will:

- Recognise the typical features of print and Web content
- Assess the quality of online content based on observable criteria
- Recognise the need to closely consider user needs and align these with retrieved sources rather than focussing solely on 'quality'
- Better appreciate some of the current issues and debates over the 'quality' of online resources.

NEEDS ASSESSMENT

Trainers will ask potential participants PRIOR to attendance:

- Are you asked to recommend information resources to library users; if so what do you take account of in your recommendations?
- How do you judge the value and reliability of print information resources in the course of your work?
- Do you apply the same criteria as for print in your selection of appropriate online resources?
- Suggest 3 things you might consider to assess the authority of a website?

If participants respond with informed ideas about how they evaluate resources, and the trainer is confident in the participants' potential ability, then they could begin with the final Evaluation exercise (1.3E) to consolidate understanding and then proceed to the **Plus** section to review additional concepts. Participants with little prior experience of online resources could omit the **Plus** section at this stage of their training.

1.3 TRAINING CONTENT: EVALUATING ONLINE CONTENT
DURATION OF SESSION: 45-55 MINUTES

Content	Duration	Key Points	Exercise
Session Objectives	4 min	Context (relation to s.1.1 and what is to come). Online information presents more challenges to assessing its quality so need to establish an approach to this.	
Introduction to 'publication'	6 min	Accept all reasonable suggestions; draft key points on whiteboard Elicit (interim) conclusions: <ul style="list-style-type: none"> Web is a diverse medium with vast range in 'quality' Production standards not as consistently high as print because of the comparative ease of publishing Required to apply bit more scepticism than print in assessing merit – but quality resources do exist. 	Participants asked 'what does it mean to publish something in print form?' Suggestions briefly noted on whiteboard as 'criteria' and left for later review. Then asked to do Google search on "ed hillary" quickly note results and ask if these criteria apply to most material published on Web? [Tick off those suggestions from list that apply; question mark those that doubtful]. Participants then asked to do similar search on Te Ara , examine results then look at 'Who is Te Ara' Web page (<i>About this site > Who is Te Ara</i>) and suggest how many of the print criteria apply? Note that these are some of 'criteria' we use in assessing quality of a Web page/source.
Criteria for Assessing Quality of Web pages	3 min	Information 'quality' of online resources can be assessed by applying 4 traditional questions: who, why, when, what?	Give Handout 1.3 to participants and refer them to section on <i>Assessing Information Quality</i> .
	5-8 min	Who? (Who put up the site?) If necessary point out link to <i>About the BBC > Reports, Policies & Guidelines > Editorial Guidelines</i> .	Participants directed to Google search on <i>snoring problems</i> and look at Web page: <i>Essortemnt/Snoring Problems</i> (http://nhnh.essortment.com/snoringproblems_rwmt.htm) and to apply the criteria/questions listed under <i>Assessing Information Quality-Who</i> section. ...then add 'BBC' to front of search terms, look at BBC page on <i>Sleep Disorders</i> and repeat assessment. Participants asked to briefly report back to group. [Alternatively

			participants could work in pairs with each pair reporting back]
	5-8 min	Why? (What's the purpose of the site?)	Participants directed to look at: <i>Teens health > Common Sleep Problems</i> (http://www.kidshealth.org/teen/your_body/take_care/sleep.html) and <i>Sleepwell</i> (www.sleepwell.co.nz) sites and to apply the criteria listed under <i>Assessing Information Quality - Why</i> section. Participants [or pairs of] asked to briefly report back orally to group.
	5-8 min	When? (Is it up-to-date?) If necessary point out date at bottom of page, age of material on <i>Sleep Home Pages-BiblioSleep</i> , dead links etc. + Press Release page on <i>British Snoring</i> site	Participants look at these pages: www.sleephomepages.org and www.britishsnoring.co.uk and apply the criteria listed under <i>Assessing Information Quality - When</i> section. Participants [or pairs of] asked to briefly report back orally to group.
	5-8 minutes	What? (What level, form etc of info is it?)	Participants look at these pages: www.sleepnet.com/insomnia.html and http://en.wikipedia.org/wiki/Snoring and to apply the criteria listed under <i>Assessing Information Quality-What</i> section. Participants [or pairs of] asked to briefly report back orally to group.
Application of Criteria to Database article/content	8 min	Evaluation will show that 'database' material generally is based on or more closely corresponds to print.	Participants handed out and asked to complete Exercise 1.3E in <i>Health & Wellness</i> database. Then asked to comment on any significant differences in assessed 'quality' between database articles and the range of websites they have just reviewed?
Recap	4 min		Review original criteria list of 'what is means to publish' (on whiteboard). Ask participants what other criteria or issues have been raised by the exercise? List and recap most useful.

EVALUATION EXERCISE 1.3 E

Evaluate the *Gale Health & Wellness* database's information on 'snoring': keyword search on **snoring**, select the article from the *Gale Encyclopedia of Medicine 2006* apply the 'Who, Why, When, What' test (5 minutes max.)
 Make comments as appropriate. You may not be able to answer every question,

?	QUESTION	YOUR NOTES
Who	Is the author of the material named and are you told anything about them?	
	What sort of organisation is responsible for the source? Will its reputation suffer if the information is wrong?	
	Is there any indication that the material has been edited or reviewed by experts?	
Why	Is the article trying to sell you something or promote a particular organisation?	
	Does it appear to have been created as a public service?	
	Is it trying to educate, inform or persuade you?	
When	When was it written? Is currency essential?	
	Is there any sign of recent research or evidence to support its assertions?	
What	Is it well-written and presented?	
	Is it a good discussion with cited evidence or just a list of unsupported recommendations?	
	Is it taken from a book, an article, a pamphlet or promotional flyer?	
	Is there a list of further reading? Are statements made with reference to other sources?	

1.3+ TRAINING CONTENT: EVALUATING ONLINE CONTENT – PLUS
DURATION OF SESSION: 20 MINUTES

Content	Duration	Key Points	Exercise
Session Objectives		Context (relation to initial part of s.1.3) + intended coverage.	
Matching of needs to 'best' source	10 min	<p>'Quality' must relate as strongly to information need - the context of the query - as any set of criteria applied in abstract.</p> <p>Note there is no one 'best' source – it always depends on need (intended use, who its for, ease of extraction of information etc.)</p>	<p>Participants asked to search Google on the topic/keyword 'advergaming' and assess the 'best' source of two sites: Howstuffworks (http://money.howstuffworks.com/advergaming.htm) vs. Kaiser FF Report ('Its Childs Play') http://www.kff.org/entmedia/upload/7536.pdf)</p> <p>Then asked to determine the best source for:</p> <ol style="list-style-type: none"> 1. A student doing a marketing assignment who wants to know how 'advergaming' is done and how effective it is? 2. A student doing a Media project on the impact of advergaming on children's health? <p>...and then comment on which is the 'best' overall source? Group consensus elicited by brief discussion.</p>
The collaborative power of the Web and its relation to 'quality'	10 min	<p>Web sources may not necessarily be compiled by experts or under the controls of print publishing, but the massed contributions of many can produce resources that are more inclusive or responsive to current events, or more in tune with current cultural issues.</p>	<p>Participants asked to comment on which of two online encyclopedias - <i>Wikipedia</i> and <i>Encyclopaedia Britannica</i> - is the best general source for 'quality' information?</p> <p>Then asked to assess which is the <u>preferred</u> source for a Y12 student doing a project on '<i>infomercials</i>': their effectiveness, current scale of use and consumer concerns? Alt: Compare entries on <i>Barack Obama</i> for student doing project on modern political leaders (or other current prominent person)</p> <p>Trainer elicits and posts on whiteboard criteria used in making the assessment of preference [it may not be clear cut!].</p>

1.3 EVALUATING ONLINE CONTENT

PUBLISHING: PRINT VS. THE WEB

Any common dictionary, such as the *Pocket Oxford*, will give two relevant definitions of what it is to “publish” along the lines of:

- To prepare and issue (a book, magazine, etc) for public sale
- To make generally known; formally announce.

In the past these two processes were pretty closely connected to one another – the way in which information was ‘made public’ was commonly through books, magazines and newspapers, generally produced by professional publishers. So-called “self-publishing” did exist but such works were not well regarded compared to those put out by commercial or academic publishers. To be published in print a work generally has to:

- Be accepted by a publisher as worthy of publication - not only likely to sell sufficient copies but to uphold the publisher’s standing as well; they have to carry the risk of bad reviews and damage to the author’s and publisher’s reputation
- Pass an editorial review that may include fact-checking, legal checking for libel and/or evaluation by independent experts
- Be sufficiently original to not risk charges of ‘plagiarism’ - that that text or ideas were not ‘stolen’ from another (such as the case against Dan Brown’s *Da Vinci Code* novel in 2006).

Compared with print, publishing material on the Web is remarkably easy and cheap. Note the second definition of publishing above (“to make generally known...”), well this is what the Web does. Anyone with an Internet connection can:

- Set up a free website or ‘blog’ and say more or less whatever they like, acting anonymously or under an assumed identity if they choose
- Present work of dubious validity as if it were properly researched and validated with a lesser risk of exposure or criticism
- Ignore scholarly conventions such as the need to provide supporting reference statements.

Blog: short for Web log - an online site where users post informal journals of their thoughts and comments. They generally represent the personality of the author or the website. ‘Blogging’ can be also be an effective communications tool for groups of people with similar interests to keep in touch or debate ideas.

While the Web can be pretty anarchic in part and so requires a fairly critical approach, it does however have some very positive aspects:

- It removes barriers of distance - anyone with an Internet connection potentially has access to the whole Web, particularly important in a remote country like ours
- It is democratic – everyone gets to have their say
- Web publishing is fast and fairly cheap compared to print
- The power of search engines can makes Web information very accessible.

These sorts of distinctions are often presented as clear evidence of the differences in ‘quality’ of publishing in the print vs. online worlds. A bit of reflection however suggests lines are not so clear and are becoming more blurred. We are now starting to see greater legal and commercial pressure put on what can be ‘published’ on the Web - consider the 2007 NZ cases of coverage of police officer trials and the censure of a blog that gave ratings to social workers. And, if we look at the more informal tabloid end of the print world (that makes an art form of half truths and gossip) then quality is questionable? The accessibility of the Web is also encouraging the creation of many quality resources with as tight an editorial control as print. So, can you trust print more than digital? A sceptical, informed approach might be best for

both. Poor quality information has always existed – the Web just makes it easier to create or disseminate it. Web items do though often present greater difficulty in figuring out their origins, currency, reason for being there, or even country of publication (its all global on the Web). This requires us to take a more structured approach to evaluating information on the Web as many of the 'clues' we unconsciously use in looking at print quality are not so evident.

ASSESSING INFORMATION QUALITY

While the relevance (how closely the information matches your needs) of a Web page may be reasonably obvious, assessing the 'quality' (the validity, trustworthiness, currency...) can be more challenging. In making such judgements it helps to get into the habit of asking four key questions:

- **Who** is responsible for this material?
- **Why** was it placed on the Web?
- **When** was it placed there and/or updated?
- **What** sort of information is it and what can I tell by looking at it?

Look at the Web page and ask yourself:

Who?

- Is the author (person, company, organisation...) of the material named and are you told anything about them? (If not try 'Googling' them)
- What sort of organisation is responsible for the Website – is it a .com/.co or an .org site? Is there a link to information about the organisation? Will its reputation suffer if the information is wrong? (NB. look for an 'About Us' link)
- Is it a personal or an institutional page? (be more cautious with a personal)
- Is there any indication that the material has been edited or reviewed by experts?

Note: you may need to move from the Web page you are looking at to the Home page for the site, or look for links (often at the bottom of the page) that start with the word "About..."

Why?

- Is the purpose of the site clear - is it trying to sell you a product, service, or an idea?
- Is it trying to educate, inform or persuade you? (these won't necessarily be the same thing!)
- Does it appear to have been created as a public service?
- Is it promoting the work or viewpoint of an organisation? If so does it cover other perspectives?

When?

- When was it created? (look at the base or top of the Home page or for dates)
- How recently was it updated? (again check the top or bottom of page; note that blog or 'wiki' items are always date stamped despite their informality)
- Is there any sign of recently added content? Is it an active site or one that seems to be just left unchanged?
- Does it contain lots of 'dead' links?

Note: Up-to-dateness may not always matter, but if you need recent material then these tests will be important.

What?

- Has the material previously been published in another format? eg. was it originally a book, newspaper or magazine article?
- Is it well-written and professionally presented?
- Does it present real discussion of the topic or just a list or conclusions or recommendations?
- If it was in print would you describe it as a book (or part of a book), an article, a pamphlet or an advertising flyer? (the latter two would be lower quality)
- Is there a list of further reading? Does the author support statements made with references or links to other reputable sources? Are there links to other reputable Web sites?
- Who is linking to the site? (Check this by a Google search - *link:<URL of site>*). If reputable organisations link to it then it may be more trustworthy.

APPLYING THESE PRINCIPLES

A piece of Web information does not need to check out on all of these criteria to be relevant or useful. An encyclopaedia entry for example may not have been updated within the past few years, many useful entries on websites may be unsigned, and some organisation websites may contain advertising. But taken together, the items on this checklist provide an approach to recognising the sort of information that you can accept as being valid or trustworthy. Even if met, these criteria do not of course ensure that information is 'true' - that may require a great deal more study and research - but they can save us from wasting a lot of time. Nor will the criteria protect you against fraud or error - fraud of course is about avoiding detection so someone wanting to fake a website will probably ensure that it looks as much as possible like the real thing. Fakery and error do also occur with regard to print materials but the Web makes it easier to remain anonymous and cover tracks.

For the present print material still has an advantage over Web material in terms of consistent quality simply because of the higher barriers to publication and the need for print organisations to protect their reputations. Material included within library databases (as in the EPIC resources) is mainly based on print sources (newspapers, magazines, reference books...) and so has been through the same level of quality control. However it needs to face the same evaluation as other Internet resources and there is no reason for any single source to be considered absolutely reliable. No information should be regarded as of value until you understand its origins.

EVALUATING ONLINE CONTENT - PLUS

MATCHING RESOURCES TO NEED

While clear, descriptive measures for evaluating the 'quality' of an online source (the 'who, what, when, why' criteria of s.1.3) are very useful to take on board as a general approach, they should never be applied in an absolute sense. Quality always needs to be evaluated with an eye on the context of the information 'need' - what its for, how its going to be used, how much we need etc. And while it may be set in a general way by the scope of an assignment it will be up to you to assess this at the specific source level.

The 'best' source then is not necessarily that with the highest quality, but rather one which most closely matches the required level, reliability, scope and intended use. These questions are much the same for print and online sources, but with online there can also be some technical issues that may influence selection - like reliability or capability to readily return to use the sources. So in deciding how 'fit for purpose' the source is to our need, we take account of the standard factors we routinely apply whatever the medium such as:

- The **language** – is the style and reading level appropriate? Generally it shouldn't be too basic or too academic.
- The **content** – are the ideas and concepts presented at an appropriate level? If you can't understand it, or can sense the ideas are flaky or not supportable, then it's probably not of value.
- The **intended purpose** – if you only need a bit of background for personal interest then convenience may be more vital than quality. If it is evidence to support your arguments for an assignment then the perceived quality is more vital. But if you want to illustrate the news media take on some issue then their stance is more important than quality.

...and then add some other 'technical' factors peculiar to online resources:

- **Usability** – if you are recommending a site or source for others to use (rather than just printing out the information) is it straightforward to move around and find what they need? Does it have clear and live links, good labels and headers, navigational trails, a site search or site map feature, etc?
- **Technical requirements** – does the site require particular software to access critical bits of content (eg. Flash, PDFs, multimedia files...) that the customer may not have on their PC and/or find frustrating to download? Are the pages, images or other media so large in file size that they require broadband to feasibly use? And if so will your intended audience have such access? eg. you should not suggest Google Earth be used via dial-up access.
- Likely **permanence** – is the site likely to be enduring, be there next month? Publishing on the Web can be much more ephemeral than print. If you are going to put a link to it from a site page is it going to last the distance, and if so will it be maintained and updated? User home pages, personal sites, blogs, fan sites, even some commercial sites, may be a bit suspect in this regard and need some thought as to their permanence.

WEB SOURCE EVALUATION - TRENDS & DEBATES

The commonly heard notion that print is the preferred and trusted information source while the Web is a bit of a 'Wild West' of information is being increasingly undercut by a number of emerging factors that weaken such ready assumptions:

- A significant amount of print material is now being digitized and made available on the Web or via the Internet. Many of the EPIC resources are good examples of this - lots of reference books, primary sources, peer reviewed journals - all there online. The NZ *Electronic text Centre* classic NZ works are another. Google and other large online companies are currently digitising millions of books and making them available within copyright provisions. And, we are now seeing a number quality works produced under strong editorial control that are 'born digital' (created primarily as online resources). *Te Ara*, our 'Encyclopedia of NZ' is a prime example, with the print publications being later spun off the primary online content. As well many NZ government agencies are not only putting up digital copies of print resources but also creating new Web based educational resources that bring together authoritative print and digital resources eg. *MAFF Rural Source*, *StarFish*, *DOC*, *Mediascape* etc. This can all become quite confusing to the less information literate. Teachers have been known to prohibit or suggest the use of 'Internet' sources as something inferior to print. Such broad generalizations can then lump everything online in this category - including, resources such as EPIC's online journals and books. The more we provide such sources online and the more seamless we make the access, the more difficult it is for the less savvy user to appreciate the distinctions and assess quality.
- We can assume that print sources have probably been through some sort of editorial checking, maybe even a peer review process, and so have a degree of reliability, legality, validity etc. With websites it is often difficult to know how much of this has gone on, though we can reasonably assume that government or reputable academic sites will stand up to scrutiny. With commercial sites we generally exercise the same degree of skepticism as with any commercial print item that we encounter. With sites put up by lobby or political groups we appreciate they probably have a certain bias toward presenting their message in the best light. It's the great mass of Web material compiled as apparent community service, personal opinion or for popular use that presents us with the greater evaluation challenges. While these may not be subject to the standard print publishing processes and editorial control, the rather unique characteristics of the Web can however provide a form of informal peer review. In the same way that the Web makes it so simple to 'publish', it can also make it easy for site viewers to comment on, correct or contest any information posted. And when you have thousands of sharp eyes doing this for popular sites then the chances of errors, biased arguments, or plagiarized material being picked up and identified can be arguably higher than for much of print? Emerging Internet technologies that facilitate, even encourage audience participation (so-called 'Web 2.0') are making this more likely and developing the capacity of the Web to form a massive, self-correcting, online community. We have seen in recent political campaigns world wide, how informal Web commentary in blogs or independent news sites can often contest and break political news faster than the more cautious, editorially controlled mainstream media, with its unwritten but persistent biases. And we no longer have to depend on just the opinion of our local newspaper reviewers when we can log onto various sites that review movies, books, or consumer goods using the collective, critical input of the many - the 'wisdom of the crowd'. While the 'crowd' is not always wise - certain criteria have to exist to facilitate this - a broad wiki type set up can encourage collective contribution and error or bias correction.

The only certainty then is that all sources in any media need to be viewed with a critical eye, and that developing structured approaches to doing this is a skill that will be useful in all facets of study and life.

A CASE STUDY: WIKIPEDIA VS. BRITANNICA

The public debate in 2006 over the relative merits of the 'communal' online encyclopedia *Wikipedia* vs. the long established *Encyclopedia Britannica* is an interesting example of the complexity of many of the above issues. The collaborative 'wiki' technology allows anyone to create or contribute articles to *Wikipedia* - some 40,000+ do. And, while this leads to a lot of inconsistency in level, quality and scope of articles, it does mean that for many areas there are a small number of readers who will rapidly correct, expand on or enrich material - with the assistance of a few *Wikipedia* moderators who curtail the excesses or bias of over-heated areas. It also in a manner provides a focused forum for debating issues, something a print work can't do.

EB by contrast has a large number of informed, expert contributors but a much more cumbersome publishing process that results in many articles not being updated for years (even in the online version) or many topics regarded as outside of their mainstream, rather US focused perspective. A researcher published a systematic assessment of the two as 'encyclopedic' resources in *Nature* journal in 2006, concluding the *EB* was almost as likely as *Wikipedia* to have errors in a random selection of areas.

While the validity of this was hotly debated it did vividly present a host of evaluation issues and illustrate the difficulty of determining the most accurate, much less the 'best' source in a rapidly expanding online world. The core issue itself is not new – librarians have forever commented on customers of all ages being less sceptical of print sources than is prudent. But the amount of, and ease of access to, less formal material has increased the scope of it all. The capability to quickly assess the merit and status of online content is accordingly a key skill for librarians to cultivate and convey to others. This competency will become even more critical as 'Web 2.0' (with its expanding range of means to participate and collaborate online) rapidly evolves, and the authorship or expertise of much information becomes more difficult to determine.

An interesting recent (2008) development is that *EB* is now to produce its own blog to sit alongside the online *EBO* in order to "promote greater participation by both our expert contributors and readers" !

Librarians can find a fuller discussion of the issue in:

P. Berinstein. *Wikipedia and Britannica: the Kid's All Right (and So's the Old Man)*. *Searcher*, Mar 2006. (see: <http://www.infotoday.com/searcher/mar06/berinstein.shtml>)

Students and others could reflect on the debate in the following blog or news items:

Science Progress article (note the discussion debate):

<http://www.scienceprogress.org/2008/02/wikipedia-and-the-new-curriculum/>

The Fishbowl blog:

http://fishbowl.pastiche.org/2005/12/20/wikipedia_vs_britannica_apples_vs_oranges

Derek Wenmoth's comment on *EB*'s blog:

http://blog.core-ed.net/derek/2008/06/if_you_cant_beat_them_join_the.html