

Applications of ICT in Libraries

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1 Diploma ICTL

1.1 Introduction

The Advanced Certificate and the Advanced Diploma in Applications of ICT in Libraries were developed by the Scottish Library and Information Council (SLIC)¹ and are validated by the Scottish Qualifications Authority (SQA)²

Further information can be obtained from angela.lees@sqa.org.uk

-----CHANGES TO THE QUALIFICATION-----

The Certificate and Diploma have been superceded by the Professional Development Award in Applications of ICT in Libraries at levels 7 and 8 (English and Welsh levels 4 and 5). They consist of much the same content as the certificate and diploma but the PDAs include two new units:

Digital Culture: Online Communication: In this unit you will focus on the “new literacies” created by digital technologies. You will consider Web 2.0 tools, including social networks, online publishing, online collaboration and virtual worlds.

Digital Culture: Online Collaboration: This unit considers the sociology and operation of virtual communities. You will discuss the uses of Web 2.0 and online collaboration tools within your workplace.

To achieve the level 7 award you must complete three mandatory units:

·Locating Information on Behalf of Clients ·Using ICT in Library Practice & Professional Development ·Supporting Clients in the safe & Legal use of ICT

and one of:

·Supporting Reader Development ·Digital Culture: Online Communication

1.1.1 What are these qualifications?

These qualifications are based on the training already carried out as during the People’s Network programme. They have been developed by the Scottish Library and Information

1 <http://www.slainte.org.uk>

2 <http://www.sqa.org.uk>

Council (SLIC)³ and are accredited by the Scottish Qualifications Authority (SQA)⁴. The level of the qualifications is roughly equivalent to a UK Higher National Certificate or Diploma (HNC/HND), a US Associate Degree or years 1 and 2 of a UK or US undergraduate degree. Credit for approximately one year of study may be transferable to other academic programmes.

The **Museums, Libraries and Archives Council (MLA)**, **SLIC**, **CyMAL** (the Welsh body) and **DCAL** (the Northern Ireland department) supported the development of the qualifications for use throughout the UK. SQA is currently exploring accreditation with the **QCA (Qualifications & Curriculum Authority)** and articulation into higher education. The qualifications have been reviewed by content advisers from across the UK in order to balance any variation in the context of library service delivery and the learning materials contain UK-wide examples of best practice.

1.1.2 Who are they for?

These qualifications are appropriate to library staff in any sector: public libraries, higher education, further education, schools, health libraries, national libraries etc. They are suitable for experienced staff (by showing how ICT can be used in traditional library work) and they are also suitable for **new entrants** to the profession. They may also be of interest to English-speaking library staff in other countries.

Candidates would normally be expected to have reached a reasonable level of general education, for example A-Level or SCE Higher and possess reasonable ICT skills, such as PC Passport or ECDL.

1.1.3 What is the content?

The **Level 7 in Applications of ICT in Libraries** consists of six 8 credit units, each roughly equivalent to 80 hours of study, as follows:

Mandatory units:

- Locating information on behalf of clients Applications of ICT in Libraries/Locating Information⁵
- Using ICT in professional practice Applications of ICT in Libraries/Using ICT in Professional Practice⁶
- Supporting clients in the safe and legal use of ICT Applications of ICT in Libraries/Safe and Legal Use of ICT⁷

Optional Units (learners undertake one of these units):

3 <http://slainte.org.uk>

4 <http://www.sqa.org.uk>

5 Chapter 3 on page 15

6 Chapter 11 on page 77

7 Chapter 12 on page 97

- Supporting reader development Applications of ICT in Libraries/Supporting Reader Development⁸
- Supporting client learning Applications of ICT in Libraries/Supporting Client Learning⁹
- Digital Culture: digital communication

The **Level 8 in Applications of ICT in Libraries** includes three 16 credit units (160 hours of study) and one 8 credit unit (80 hours of study):

Optional Units (learners undertake one of these units):

- Net Navigator Applications of ICT in Libraries/Net Navigator¹⁰
- Educator Applications of ICT in Libraries/Educator¹¹

(candidates must choose one of these)

Mandatory units:

- Graded Unit – Reflective Project Applications of ICT in Libraries/Graded Unit Project¹²
- Digital Culture: digital collaboration

Summaries of the **unit content** can be found later in this document.

1.1.4 What support material is available?

A wide range of support material is available, including top-up learning material, assessment tools and electronic log-books to record assignments for authentication in the workplace. The top-up learning material is available in Wikibook format.

1.1.5 How are they assessed?

Almost all of the assessment is of a practical nature and involves the completion of logbooks relating to workplace activities, essays and reports. Most assessments can be submitted online.

1.1.6 How do they relate to professional qualifications?

1.1.7 What are the benefits?

There are a number of benefits for individual and employers in supporting this development. Staff will have the chance to have their People's Network learning accredited, improve their qualifications, gain academic credits for transfer into other courses or improve their promotion prospects. From the employer's perspective, the qualifications will contribute

8 Chapter 4 on page 39

9 Chapter 10 on page 53

10 Chapter 13 on page 129

11 Chapter 14 on page 177

12 <https://en.wikibooks.org/wiki/Applications%20of%20ICT%20in%20Libraries%2FGraded%20Unit%20Project>

towards workforce development and meeting corporate quality agendas such as Investors in People and Charter Mark.

1.2 Applications of ICT in Libraries: Unit Summaries

You can obtain the complete **unit specification** by following the link after the title.

1.2.1 Locating information on behalf of clients

The purpose of this unit is to guide candidates to work logically through the steps of a reference enquiry, typical for a public library, using Internet resources.

1. Define the precise nature of the enquiry in conjunction with the client.
2. Create a search strategy to fully satisfy the client's enquiry.
3. Evaluate the results of the search in terms of validity of information found and its appropriateness in meeting the client's needs.

1.2.2 Supporting reader development

The purpose of this unit is to develop skills in public library staff required to use online resources in order to support clients in the development of their reading.

1. Demonstrate an understanding of reader development.
2. Identify, evaluate and use a range of online resources that promote reading to adult clients.
3. Identify, evaluate and use a range of online resources that promote reading to younger clients.
4. Identify, evaluate and use a range of online resources that promote reading to clients with special needs or with specific language requirements.

1.2.3 Supporting client learning

The purpose of this unit is to develop skills in public library staff required to support clients in their selection and use of ICT-based learning packages within the library.

1. Profile client in terms of ICT competence and learning goals.
2. Select a range ICT-based package(s) to support this learning.
3. Provide appropriate ICT support to the client in the use of their chosen learning package(s).

1.2.4 Using ICT in professional practice

The purpose of this unit is to develop skills in public library staff required to use ICT in support of professional practice.

1. Use an automated library management system proficiently.

2. Use and evaluate online selection tools.
3. Use ICT in continuing professional development, to join in professional discussions and to improve own professional practice.

1.2.5 Supporting clients in the safe and legal use of ICT

The purpose of this unit is to develop skills in public library staff required to support clients so that they can use ICT safely for a range of purposes and within the current legislative framework.

1. Demonstrate safe practice relating to the use of ICT for communication.
2. Demonstrate ways in which ICT can support clients with special needs or with specific language requirements.
3. Demonstrate awareness of legislation relating to the use of ICT for storage, manipulation and access of information.
4. Demonstrate awareness of Freedom of Information legislation and information access issues.

1.2.6 Digital Culture: Online Communication

This unit focuses on using social media for communication purposes. It supports developing new digital literacies and using these skills to manage information effectively.

1. Examines communication using social media and collaborative documents
2. Explores using online publishing tools to support library services and continuing professional development
3. Uses new technologies to reflect on the information society

1.2.7 Carrying Out the Educator Role

The purpose of this unit is to develop skills in design and delivery of training on ICT-related topics.

1. Establish ICT training needs for individuals and groups.
2. Select delivery approach which takes account of learner's preferred learning style and is appropriate for learning content.
3. Design learning materials and programmes on ICT-related topics.
4. Utilise appropriate skills to support individuals and groups in their use of learning materials and programmes on ICT related topics
5. Evaluate and revise learning materials and programmes on ICT-related topics.

1.2.8 Integrative Unit (Project)

This Integrative Unit is designed to provide evidence that the candidate has integrated the knowledge and skills acquired throughout the programme into his/her ongoing professional practice.

1. Review the programme to identify key areas of learning.
2. Demonstrate the incorporation of key areas into ongoing professional practice.
3. Formulate an approach to continuing professional development in key areas.

1.3 Certification

Anyone wishing to be certified for the Diploma or Advanced Diploma must enrol as a student at one of the centres approved by SQA to offer the programmes. Centres may offer the programmes by different means, e.g.: full-time or part time, presencial, distance learning etc.

1.3.1 Approved Centres

Millennium City Academy

Millennium City Academy is an associate college of **London Graduate School of Management**, a private college located in the heart of London, UK. It offers the ICTL programmes by distance learning. Full details can be obtained from the college's web site <http://www.lgsm.ac>, or by emailing ictl@lgsm.ac.

Grwp Llandrillo Menai

Grwp Llandrillo Menai is the largest college group in Wales and one of the largest colleges in the UK. The Library Resource Centre at the Rhos on Sea site offers the ICTL course by distance learning. Full details can be obtained from the college's web site <http://www.llandrillo.ac.uk/course/pda-in-applications-of-ict-in-libraries-sqa-level-7/> and <http://www.llandrillo.ac.uk/course/pda-in-applications-of-ict-in-libraries-sqa-level-8/>

2 Advanced Diploma ICTL

2.1 Introduction

The **Advanced Certificate** and the **Advanced Diploma in Applications of ICT in Libraries** were developed by the **Scottish Library and Information Council (SLIC)**¹ and are validated by the **Scottish Qualifications Authority (SQA)**²

CHANGES TO THE QUALIFICATION The Advanced Diploma has been superceded by the Professional Development Award in Applications of ICT in Libraries at level 8 (English and Welsh level 5). It consist of much the same content as the Advanced Diploma but the PDA includes a new unit:

Digital Culture: Online Collaboration: This unit considers the sociology and operation of virtual communities. You will discuss the uses of Web 2.0 and online collaboration tools within your workplace.

To achieve the level 8 award you must complete the level 7 award plus two mandatory units:

- Digital Culture: Online Collaboration and - Reflective Practice unit

and one of either

- Carrying out the Net Navigator Role or - Carrying out the Educator Role

2.1.1 What are these qualifications?

These qualifications are based on the training already carried out as during the People's Network programme. They have been developed by the Scottish Library and Information Council (SLIC)³ and are accredited by the Scottish Qualifications Authority (SQA)⁴. The level of the qualifications is roughly equivalent to a UK Higher National Certificate or Diploma (HNC/HND), a US Associate Degree or years 1 and 2 of a UK or US undergraduate degree. Credit for approximately one year of study may be transferable to other academic programmes.

The **Museums, Libraries and Archives Council (MLA)**, **SLIC**, **CyMAL** (the Welsh body) and **DCAL** (the Northern Ireland department) supported the development of the qualifications for use throughout the UK. SQA is currently exploring accreditation with

1 <http://www.slainte.org.uk>

2 <http://www.sqa.org.uk>

3 <http://slainte.org.uk>

4 <http://www.sqa.org.uk>

the **QCA (Qualifications & Curriculum Authority)** and articulation into higher education. The qualifications have been reviewed by content advisers from across the UK in order to balance any variation in the context of library service delivery and the learning materials contain UK-wide examples of best practice.

2.1.2 Who are they for?

These qualifications will permit library staff who have already undergone the **People's Network** training to obtain accreditation, but they are also suitable for **new entrants** to the profession. The main target group is staff working in the UK public library service, but the qualifications are also likely to be of interest to staff in other library services, particularly **school libraries**. They may also be of interest to English-speaking library staff in other countries.

Candidates would normally be expected to have reached a reasonable level of general education, for example A-Level or SCE Higher and possess reasonable ICT skills, such as PC Passport or ECDL.

2.1.3 What is the content?

The **Diploma in Applications of ICT in Libraries** consists of five single-credit units (each roughly equivalent to 40 hours of study), as follows:

- Unit 1: Locating information on behalf of clients Applications of ICT in Libraries/Locating Information⁵
- Unit 2: Supporting reader development Applications of ICT in Libraries/Supporting Reader Development⁶
- Unit 3: Supporting client learning Applications of ICT in Libraries/Supporting Client Learning⁷
- Unit 4: Using ICT in professional practice Applications of ICT in Libraries/Using ICT in Professional Practice⁸
- Unit 5: Supporting clients in the safe and legal use of ICT Applications of ICT in Libraries/Safe and Legal Use of ICT⁹

The **Advanced Diploma in Applications of ICT in Libraries** includes all of the above units, plus the following double-credit units, each roughly equivalent to 80 hours of study:

- Unit 6: Net Navigator Applications of ICT in Libraries/Net Navigator¹⁰
- Unit 7: Educator Applications of ICT in Libraries/Educator¹¹

(candidates must choose one of these)

5 Chapter 3 on page 15

6 Chapter 4 on page 39

7 Chapter 10 on page 53

8 Chapter 11 on page 77

9 Chapter 12 on page 97

10 Chapter 13 on page 129

11 Chapter 14 on page 177

- Unit 8: Graded Unit – Project Applications of ICT in Libraries/Graded Unit Project¹²
Summaries of the **unit content** can be found later in this document.

2.1.4 What support material is available?

A wide range of support material is available, including top-up learning material, assessment tools and electronic log-books to record assignments for authentication in the workplace. The top-up learning material is available in Wikibook format and also in an interactive web-based format at <http://www.ict1.org.uk>.

The top-up material includes activities, prompts and refresher learning. More than 600 pages of material have already been written and this is being expanded all the time. The top-up learning can be integrated with People's Network, cascade or new training and work-based practice.

2.1.5 How are they assessed?

Almost all of the assessment is of a practical nature and involves the completion of logbooks relating to workplace activities, essays and reports. Most assessments can be submitted online.

2.1.6 How do they relate to professional qualifications?

The qualifications support the **CILIP Framework of Qualifications** and can be used as evidence towards Certification, Chartership and Revalidation submissions. The Diplomas are based on reflective practice, and electronic logbooks make it easy to build portfolios.

2.1.7 What are the benefits?

There are a number of benefits for individual and employers in supporting this development. Staff will have the chance to have their People's Network learning accredited, improve their qualifications, gain academic credits for transfer into other courses or improve their promotion prospects. From the employer's perspective, the qualifications will contribute towards workforce development and meeting corporate quality agendas such as Investors in People and Charter Mark.

2.2 Applications of ICT in Libraries: Unit Summaries

You can obtain the complete **unit specification** by following the link after the title.

¹² <https://en.wikibooks.org/wiki/Applications%20of%20ICT%20in%20Libraries%2FGraded%20Unit%20Project>

2.2.1 Unit 1: Locating information on behalf of clients

The purpose of this unit is to guide candidates to work logically through the steps of a reference enquiry, typical for a public library, using internet resources.

1. Define the precise nature of the enquiry in conjunction with the client.
2. Create a search strategy to fully satisfy the client's enquiry.
3. Evaluate the results of the search in terms of validity of information found and its appropriateness in meeting the client's needs.

2.2.2 Unit 2: Supporting reader development

The purpose of this unit is to develop skills in public library staff required to use online resources in order to support clients in the development of their reading.

1. Demonstrate an understanding of reader development.
2. Identify, evaluate and use a range of online resources that promote reading to adult clients.
3. Identify, evaluate and use a range of online resources that promote reading to younger clients.
4. Identify, evaluate and use a range of online resources that promote reading to clients with special needs or with specific language requirements.

2.2.3 Unit 3: Supporting clients learning

The purpose of this unit is to develop skills in public library staff required to support clients in their selection and use of ICT-based learning packages within the library.

1. Profile client in terms of ICT competence and learning goals.
2. Select a range ICT-based package(s) to support this learning.
3. Provide appropriate ICT support to the client in the use of their chosen learning package(s).

2.2.4 Unit 4: Using ICT in professional practice

The purpose of this unit is to develop skills in public library staff required to use ICT in support of professional practice.

1. Use an automated library management system proficiently.
2. Use and evaluate online selection tools.
3. Use ICT in continuing professional development, to join in professional discussions and to improve own professional practice.

2.2.5 Unit 5 Supporting clients in the safe and legal use of ICT

The purpose of this unit is to develop skills in public library staff required to support clients so that they can use ICT safely for a range of purposes and within the current legislative framework.

1. Demonstrate safe practice relating to the use of ICT for communication.
2. Demonstrate ways in which ICT can support clients with special needs or with specific language requirements.
3. Demonstrate awareness of legislation relating to the use of ICT for storage, manipulation and access of information.
4. Demonstrate awareness of Freedom of Information legislation and information access issues.

2.2.6 Unit 6: Carrying Out the Net Navigator Role

The purpose of this unit is to guide candidates to work logically through the steps of a complex reference enquiry, typical for a public library, using a complex search strategy, a wide range of internet resources and current awareness and alerting services.

1. Define the detail of a complex enquiry in conjunction with the client.
2. Demonstrate knowledge of search logic, search engines and features of the internet.
3. Create and implement a complex search strategy.
4. Evaluate websites located in a complex search.
5. Review effectiveness of search strategy.
6. Use ICT to set up current awareness and alerting services.

2.2.7 Unit 7: Carrying Out the Educator Role

The purpose of this unit is to develop skills in design and delivery of training on ICT-related topics.

1. Establish ICT training needs for individuals and groups.
2. Select delivery approach which takes account of learner's preferred learning style and is appropriate for learning content.
3. Design learning materials and programmes on ICT-related topics.
4. Utilise appropriate skills to support individuals and groups in their use of learning materials and programmes on ICT related topics
5. Evaluate and revise learning materials and programmes on ICT-related topics.

2.2.8 Unit 8: Integrative Unit (Project)

This Integrative Unit is designed to provide evidence that the candidate has integrated the knowledge and skills acquired throughout the programme into his/her ongoing professional practice.

1. Review the programme to identify key areas of learning.
2. Demonstrate the incorporation of key areas into ongoing professional practice.

3. Formulate an approach to continuing professional development in key areas.

2.2.9 Digital Culture - Online Collaboration

This unit examines the creation, sociology and operation of virtual communities and explore how individuals can collaborate for a common purpose using social media and online publishing tools.

1. Initiate and facilitate professional discussions using forums
2. Utilising social media for professional and personal networking
3. Co-ordinate a group collaborative social media marketing project
4. Plan, edit and produce a group collaborative blog
5. Reflecting on the most appropriate social media strategy for your information service

2.3 Certification

Anyone wishing to be certified for the Diploma or Advanced Diploma must enrol as a student at one of the centres approved by SQA to offer the programmes. Centres may offer the programmes by different means, e.g.: full-time or part time, presencial, distance learning etc.

2.3.1 Approved Centres

At present there is only a single approved centre, but this is expected to change and further centres will be added as approval is granted.

Millennium City Academy

Millennium City Academy is an associate college of **London Graduate School of Management**, a private college located in the heart of London, UK. It offers the ICTL programmes by distance learning. Full details can be obtained from the college's web site <http://www.lgsm.ac>, or by emailing ictl@lgsm.ac.

3 Locating Information

This page is designed for the use of students undertaking the **Diploma** (Diploma ICTL¹) or the **Advanced Diploma** (Advanced Diploma ICTL²) in **Applications of ICT in Libraries**.

These qualifications were developed by the **Scottish Library and Information Council (SLIC)**³ and are validated by the **Scottish Qualifications Authority (SQA)**⁴

Locating Information on Behalf of Clients is a core unit in both the Diploma and Advanced Diploma programmes.

3.1 Introduction

This unit aims to develop your skills in **working logically through the steps of a reference enquiry**, typical for a public library, using Internet resources.

Reference and enquiry work has always been an integral part of the public library service. Nowadays many queries are answered using **electronic** rather than print sources. However, the **processes** and **strategies** used are the same with both print and electronic searches. So, any **experience** you have gained in answering queries through printed reference sources will enhance your competence in electronic searches.

Enquiry work can provide library staff with a great deal of **job satisfaction**. No two enquiries, or enquirers, are exactly the same – so searches for information are varied. Sometimes an information search will present a real intellectual challenge and require you to adopt an innovative or ingenious approach to tackling the enquiry. In such cases getting the required result for the enquirer is doubly rewarding. An effective enquiry service enhances the library's **reputation** with its clients and creates a positive image for library staff – as professional, efficient and helpful people.

If you are a member of staff in a public library who deals with information enquiries from clients and answers them using the Internet, you will have developed some or all of the expertise required for this unit. Read through the following information carefully. It summarises the **knowledge and skills** which you need in order to produce evidence of your competence.

The unit involves interacting with library clients, establishing their information needs and using the Internet to search for the required information. This must be done in a real library

1 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

2 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

3 <http://www.slaiente.org.uk>

4 <http://www.sqa.org.uk>

environment and you will need access to the Internet, preferably broadband. Specifically you are asked to:

Define the precise nature of the enquiry in conjunction with the client

The main knowledge and/or skills required are:

- reference interview techniques
- open and closed questions
- determining the nature of information to be provided – quantity, level, format
- constraints – deadlines for completion, currency of information and language

Create a search strategy to fully satisfy the enquiry

The main knowledge and/or skills required are:

- choice of search terms
- structuring the search
- common search engines
- directories
- meta crawlers
- portals
- bibliographic databases

Evaluate the results of the search in terms of validity of information found and its appropriateness in meeting the client's needs

The main knowledge and/or skills required are:

- validity of information - reliability, accuracy and currency
- measuring success of search in terms of client's requirements – sufficiency, format and language
- structuring and saving of search results for presentation to client, later retrieval, future updating

Assessment

The unit is assessed through four short searches and one extended search. These will be searches related to typical information needs of public library clients. Some examples are:

Short Searches

Finding out:

- the current community charge rates in your locality
- the sequel to a novel which the client has recently read
- the post code of a firm for which the client knows name, street and town
- whether UK citizens require a visa to visit Thailand

Extended Search

A client wishes to explore the topic of asylum seekers in Britain. You would produce information giving Government policy, views of other political parties, statistics on immigration etc.

3.2 Defining the precise nature of the enquiry in conjunction with the client

3.2.1 The Reference Interview

Defining the precise nature of the enquiry in conjunction with the client is often referred to as the **reference interview**. However, you may not carry this out face to face. Instead you may carry out the interview over the telephone or through a series of e-mails. It is undoubtedly easier and quicker though if you can manage to meet the client.

There are three main stages here:

- Finding out what the client wants to know
- Finding out why the client wants the information
- Finishing off the reference interview

Finding out what the client wants to know

Before you can answer a question posed by a client, you must **find out exactly what that question** is. Experienced colleagues will be able to tell you of many situations where there has been a **misperception** with a reference client, resulting in wasted time and effort and sometimes embarrassment.

Whichever means of communication you use, do remember that the reference interview is a **two-way interaction** or **dialogue** and you must take responsibility for the **efficiency** of the communication process.

The interview is likely to begin with the client asking you a question. Your task is to probe further until you are **fully satisfied** that you are clear exactly what the client wishes to find out. Remember to ask for **clarification** from the client about the topic, e.g. ask them to spell uncommon words, expand on the topic under investigation etc.

Finding out why the client wants the information

It is extremely helpful if you can establish early on in the interaction the reason **why the client wishes the information** requested. Tact may be required here, however, as some clients may be unwilling to give this information. This is especially likely where the enquiry is of a **sensitive or confidential nature**, such as a medical or financial problem. If the client appears uncomfortable or evasive when asked why the information is being sought, then it is unwise to probe further.

You should ascertain the **starting point** of the enquiry in order to avoid time being wasted on finding information which the client already knows. Ask whether the client has already undertaken any research on the topic and what the results of this were. This can give guidance on successful and unsuccessful information searching approaches. But do not write off a particular approach just because a client assures you that it has yielded no information. Remember the client is not an information specialist – you are! – and so the client may not have searched as thoroughly or as efficiently as you would.

Finishing off the reference interview

By the end of the reference interview you should be confident that the nature of the enquiry has been fully explored and that the information required by the client has been specifically defined. The reference interview also provides the opportunity to establish any special needs of the client e.g.: visual or auditory impairment.

And finally, do remember to record contact details for the client. In the excitement of exploring the enquiry and establishing the client's precise needs, it is all too easy to forget this important information. So make sure that every reference interview ends by your recording name, address, telephone, fax, e-mail details, as appropriate. If you will be phoning the client, it is also polite to note when it is convenient for the client to receive your call.

YouTube How not to conduct the reference interview <http://www.youtube.com/watch?v=dp0ldGHhJTs> Auckland City Libraries The reference interview <http://www.youtube.com/watch?v=pf3wPpH1t0&feature=related>

3.2.2 Spoken and written communication

Good communication skills are key to the reference interview. This topic provides a good opportunity for practising and refining your communication skills.

Before proceeding, list the key factors you think would lead to good communication in a reference interview. Write these down on a piece of paper.

Factors leading to good communication

We think the important factors are:

- Appropriate spoken language
- Appropriate body language
- Good feedback especially on the telephone
- Good note taking skills
- Clear and grammatical e-mails

Spoken language

You should use language which is appropriate to the client, avoiding talking down to the client or, at the other extreme, baffling the client with specialist jargon. If you do have to use a term which the client may not understand, e.g. "bibliography", be sure to explain it.

For example, how would you explain "search engine" to a client who is not familiar with this term?

You might say something like “A search engine allows you to search for websites related to a particular topic. To use a search engine, you have to choose and type in appropriate key words describing the topic

Body language

In face-to-face situations, use appropriate body language designed to set the client at ease and promote effective communication. Smile and greet the client by name if possible. Lean forward slightly and use eye contact to show your interest in the conversation. Try to carry out the interview in a place where both you and the client are sitting comfortably and at the same level, preferably side by side.

What would you deduce from the body language of a client who fidgeted during the reference interview?

The most likely explanations are that the client:

- is in a hurry, perhaps because of another appointment
- may feel nervous in the library environment or about asking for your assistance with their query.

Test your understanding of body language with this simple quiz - <http://www.kent.ac.uk/careers/interviews/nvc.htm>

Feedback

With telephone communications you will have to be careful in order to make sure that you fully understand what the client says because you will get no clues from their body language. You should use appropriate feedback techniques to ensure understanding of the client’s responses. For instance, you might:

- Rephrase what the client has said and repeat this back to them
- Ask if you can read out a summary of the enquiry based on the notes you have made.

See if you can pick up clues from the tone of the client’s voice. Conversely, make sure that your tone is positive and encouraging. Smiling as you speak into the phone generates a pleasant tone of voice which encourages helpful responses.

Note taking

In both face to face and telephone interactions, it is essential to take **written notes** of the main points of the conversation. These notes are your reference for checking that you have fully understood the details of the client’s enquiry.

You may have to put the query on one side for actioning later or you may pass it on to a colleague to deal with. In both cases a written record will be essential.

Writing e-mails

If you are using e-mail to communicate with the client, it is important to establish a cordial tone while remaining concise and to the point. Writing clearly and grammatically is key to this, as is structuring your e-mail so that the client can follow it easily and respond appropriately.

The correct sequence for actioning an e-mail enquiry is as follows:

1. Thank the client for the enquiry
2. Summarise what the enquiry consists of
3. Give your proposals for how you will action the enquiry
4. State when you will provide the search results
5. Request confirmation from the client that your proposed actions and timescale are acceptable

3.2.3 Open and Closed Questions

In the reference interview, you will use both **open and closed questions**. These have different uses. It is important to be able to distinguish between the two types of question and to use them appropriately.

Closed questions prompt yes/no or short factual answers, such as:

Q. What time did you come to the library? A. 9 o'clock

Q. Is your daughter called Amelia Austin? A. Yes

Closed questions are mainly used in the reference interview context to:

- elicit specific pieces of information from the client
- gain confirmation that the your understanding of what the client has said is correct - an important feedback tool

The following are examples of closed questions:

Do you use a left-handed mouse?

This is a closed question which will be answered by yes or no.

What is the charge for printing a page of A4 text?

This is a closed question which will be answered by a specific sum of money such as 10p.

Open questions encourage longer answers, such as:

Q. Why did you ask for a dictionary? A. I wanted to check whether there was a difference in meaning between "main" and "mane".

The main uses of open questions in the reference interview context are to:

- establish rapport with the client
- set the scene for the enquiry
- gain background information which is relevant to the enquiry

The following are examples of open questions:

What will your students be using this information for?

A typical reply might be: "These are students undertaking an initial course in professional cookery. They will need the data to understand the calorific content of the foods in the recipe."

Can you tell me how you went about looking for this information?

A typical reply might be: "I started off looking up autism in the encyclopedias but the information was too general and not up to date enough."

You will use both open and closed questions at appropriate times. When framing a question, always think of the type of response you hope to generate and word the question so as to encourage either a brief or an extended answer.

3.2.4 Nature of information required

Apart from the actual topic of investigation, there are other factors which need to be taken into account before a member of library staff will embark on the information search.

There are three main factors:

- the quantity of information required
- the level of information required
- the format of information required

Quantity

What appears to be the same request for information could produce results differing in quantity by orders of magnitude. You must clarify the scale of information required by the client in order to fully satisfy their needs.

It may be that reference to a single book or website is required. Alternatively many in-depth sources of information may be required so that the client can analyse a breadth of opinion on the search subject.

Providing too much information is just as unhelpful as providing too little.

Level

It is essential that the information provided is at a level of complexity which enables the client's full comprehension but does not patronise the client or tell them what they already know.

The following points are a good guide:

- the client's age (but remember age does not automatically bring wisdom!)
- the client's educational attainment
- the client's display of specialist knowledge

- the client's linguistic ability
- whether the information is intended for the client themselves or for use by other people.

Tactful questioning can be used to make an estimation of the points listed above.

Format

The results may include information in various formats.

Difficulties may arise if the client has expressed an initial preference for a format in which the information is not actually available. If the information is only available in a limited number of formats, you must alert the client to this and ascertain if any of these formats are acceptable.

If the search is not carried out with the client present, you must ascertain if the client can visit the library at a later time to access the search results or if the information must be in a format which can be e-mailed or posted to the client.

There are many formats available, including several as a result of the introduction of ICT. Your search may direct the client to items of library stock, to be used in the library or borrowed for home use. This could include:

- Printed reference sources or information CD-ROMs
- Books, audio or video material for home borrowing
- Magazines and journals
- Pamphlets or leaflets

The search results may be bibliographies or lists of website references for the client to follow up. The results may be viewed on screen by client, in the form of text, audio or video.

3.3 Create a search strategy to fully satisfy the client's enquiry

3.3.1 Choosing search terms

Searching for information using the most appropriate key words is important in any reference enquiry. But it is arguably even more important in an Internet search than when you are looking through printed indexes. When carrying out a manual search, the human mind can make links and jump from one search term to another. Computers on the other hand stick strictly to the script and will only find information which matches what you have instructed them to look for.

Let's look at how you can derive the search terms for an enquiry. You must be able to analyse a topic and break it down into its component parts. At its simplest you just extract the significant words, usually the nouns and verbs, and use these as search terms. An example would be a client asking for information about "How would you cook a vegetable like fennel?" Which word(s) would you choose as search term(s) in this enquiry?

The best choice would be "cook" and "fennel" - these two words are the essence of the enquiry. "How would you" is too general and "vegetable" would only be needed if there was some ambiguity over the nature of fennel.

The above is not necessarily true depending on the search tool you are using. For example if you use YouTube and type in - how do you... for almost any subject you will find video showing exactly what you want to know.

Examples of search terms

Here are some further examples of enquiries where you would be able to use one or more words from the client's initial question as search terms. The search terms are in bold.

I need some advice on keeping a **greyhound** as a **pet** .

What are the **symptoms** of **diabetes** ?

Who is the **chief executive** of **CILIP** (the Chartered Institute of Library and Information Professionals)?

What **colour** is the flower commonly known as **ragwort** ?

Of course, the question as posed by the enquirer may not contain words which are the best search terms. You may need to think of alternatives in the form of synonyms (words which mean the same) and words related to the terminology used by the client.

ACTIVITY 3.1

List some reasons why synonyms and related words might be better search terms.

Synonyms

It is important to consider synonyms of a search term because the word given to you by the client may be one of many which describes the concept to be searched for, e.g. if a client wishes to know about illness, it may be useful to carry out a search with the word disease instead.

Try this example for yourself. Carry out two searches using the same search engine, the first with sports competitor as your search term and the second using sports opponent and look at the differences in the results.

The term suggested by the client may be a less commonly used or out of date expression, so it is vital to think of more usual or appropriate synonyms. The client might ask about Ceylon when requiring information about the country now known as Sri Lanka. It would therefore be appropriate to search under both Ceylon and Sri Lanka.

If you have time test your knowledge of the English language here - <http://www.kent.ac.uk/careers/tests/synonyms.htm>

Related terms

Sometimes it is useful to use a related term for the word given by the client. When a client asks for information on malnutrition in Africa, a related term could be used instead of the rather broad one. An individual country could be substituted, such as Sudan. Of course, you must take into account that using related terms can change the nature of your search. In this example, using Sudan will give you results which are influenced by the particular problems suffered by this country which differ from other parts of the continent.

Can you come up with one or more potentially useful related terms in searching for each of the following?

- web 2.0 applications in a library context
- genetically modified crops
- popular music in the 1960's
- saving using insurance policies
- capital punishment in the USA

Some examples are:

For web 2.0 applications you could use social media

For genetically modified crops: Frankenstein seeds, Monsanto, soya

For popular music in the 1960's: the name of any singer or group from this era – the Beatles, Dusty Springfield

For capital punishment in the USA: death row, electric chair, gas chamber, names of individual states where capital punishment is used e.g. Texas

Another aspect to be considered when choosing search terms is that while the client may give you descriptive terms for the information required, it may be more effective to search on actual names of individuals or organisations or concepts. Taking the earlier search regarding malnutrition in Africa, the description malnutrition could lead you to search using the key words World Health Organisation. This will lead to the WHO site where information on diseases in specific African countries is quickly located.

Can you come up with a name of an organisation or individual which could be a useful specific term in searching for each of the following?

horse racing the royal family relativity theory college courses

There are many related terms which apply to each of these. Here are the examples which we thought of:

Shergar, British Horse Racing Board

The name of any member of the royal family, such as the Prince of Wales

Albert Einstein

The name of your local college

Note that the previous three techniques depend both on your ability to interpret the client's description and on your own general knowledge. With experience and in discussion with knowledgeable colleagues, your skills will increase.

Ambiguity

You should also keep in mind that some words are ambiguous. China can mean a country in the Far East or pottery products. The English language is particularly rich in such ambiguities. In the reference interview you will have clarified the meaning of any such ambiguous words. Now at the search stage, you should either use a non-ambiguous synonym (if one exists) or add an additional search term to remove the ambiguity.

Some simple examples are:

Cycle – is it the bicycle or a rotation? Yarn – could mean thread or a tall story. Kids – could lead to children or young goats.

3.3.2 Structuring an Internet search

As an information professional, you need to know all the shortcuts to information that client's request. This means more than just typing search terms into Google!

Structuring the search involves the choice of different search engines, metacrawlers, directories and portals or, where you are already familiar with appropriate websites and their content, direct interrogation of these.

In order to search effectively on the Internet, you need to be familiar with the different types of websites used to search for information. Three general types are the search engine, the metacrawler and the directory. Each operates and is used in a different way, although several sites incorporate more than one type. For example the Google site consists of both a search engine and a directory.

Search Engines

A **search engine** is a website that allows you to input words representing your search terms and uses these to come up with a list of websites which should be relevant to your search. Repeating the same search using different search engines may lead to different results due to the way in which the various search engines search the web and order the sites found. You should have experience of a selection of search engines to understand their similarities and differences. It can be illustrative to make identical searches on a number of search engines and observe the different results.

There are many different search engine sites. It is important to have a grasp of a few of the most important sites, i.e.: those that lead quickly to useful information. This can be because they specialise in a particular sector are well funded and thus comprehensive. (Such sites are popular and so command large fees for their advertising services.)

ACTIVITY 3.2

Start by familiarising yourself with some of the popular search engines which will be important in your information searching. Go to each search engine listed below and try out the search term **British planes**. Do not bother to use capital letters in the search terms as the search engines do not really take them into account.

- **Google** at <http://www.google.co.uk>
- **Yahoo** at <http://uk.yahoo.com/>
- **Clusty** at <http://clusty.com/>
- **Ask Jeeves** at <http://www.ask.co.uk/>
- **Bing** at <http://www.bing.com/>

Note down what you find in the layout and types of information displayed.

You will find four rather different results. Even if the same results were displayed (which is unlikely given the slightly vague search term), each search engine presents the information in a different manner.

Differences between search engines

Google and Yahoo are somewhat similar with a simple list but Google presents wikipedia pages and news near the top.

Ask Jeeves starts off with a list of commercial sites, all wanting to do business with you and only lower down shows you 'real' results. But in its favour, there is a list of related searches down the right hand side.

Clusty is at first similar with a list of results and a few advertisements but there is a very useful feature in that down the left hand side, it clusters the results in categories which it has discerned.

ACTIVITY 3.3

Try Clusty out with the search term **organ** and you will see the value of the category feature. Because organ is ambiguous as a search term, Clusty very neatly categorises its results into organ as a musical instrument and parts of the body. You can see that in this way Clusty can lead you to a set of results more focused than the other three search engines.

Of course none of these search engines is perfect and it would unwise to rank one above another.

Compound queries

Note that our search terms consisted of two words, **British** and **planes**. When you look down the results at all four websites, you will see that only sometimes are the two words adjacent and that some of the results only have one of the words present. Most search

engines have the convention that to indicate the compound term the words should be in quotes i.e.: “**british planes**” .

ACTIVITY 3.4

Try this out with **jersey cows** . Enter the two words with and without quotes and compare your results.

Try to get as much experience as you can in using different search engines. You will learn that although using only Google, say, will give you lots of results, the use of a few different engines may give you a better overview of the range of information available for any chosen search topic.

How search engines work

It is helpful to know a little about how search engines work. In simple terms, they search the Internet and look at the websites and their contents. They index the information they find on the site and in the metadata descriptions placed on each site by its creator. This information is used to lead from your search terms to the results. Of course each search engine uses its own particular methods. You can find out more about this either by doing a search or looking for information on the actual search engines.

This matching does have its pitfalls and if using ambiguous search terms you may get at best many useless results and at worst offensive ones.

Metacrawlers

Based on the maxim that more is better, Metacrawlers apply your search terms to several search engines simultaneously. Metacrawlers come in many forms and are sometimes described as **meta search engines** .

ACTIVITY 3.4

Familiarise yourself with some of the popular metacrawlers which you can use in your information searching:

Go to each metacrawler listed below and try out the search term **British planes** .

- **Dogpile** at <http://www.dogpile.co.uk/>
- **Surfwax** at <http://www.surfwax.com/>
- **Mamma** at <http://www.mamma.com/>
- **Ixquick** at <http://www.ixquick.com/eng/>

Note down what you find in the layout and types of information displayed.

Again there are different results and some very different layouts.

One major reason for using metacrawlers rather than individual search engines is that you hope to get a good spread of the best information. We would suggest that this works best early in a search to get an idea of the breadth of the information available.

Using a metacrawler also saves you having to visit each of the individual search engines.

Web directories

Unlike search engines, web directories do not search for you but are arranged as an alphabetically ordered index to the web, developing into a **tree structure** of levels of sub-categories. This is somewhat similar to the subject index in a print encyclopedia.

Directories can be very useful in allowing you to home in on the general area of a reference search. However there are countless directory sites, many of which are poorly maintained. Poor maintenance manifests itself with broken links or links to inappropriate material. You should make yourself familiar with the good examples of directories and we will examine some of these now.

General purpose directory sites are provided by many search engines: Google and Yahoo are examples. Most confusingly they show both the categories which you can descend and a search facility which looks like the web search but is in fact used to search the categories.

ACTIVITY 3.5

Examine some of the general purpose web directories which you can use in your information searching:

Go to each directory listed below and try to look for information on flower arranging:

- Yahoo at <http://dir.yahoo.com/>
- Open directory at <http://dmoz.org/>

Differences between directories and search engines

One key difference between the directory and the search engine is that the entries in the directory should be compiled ‘by hand’ and not through automated searching. This may be seen as an advantage if you consider that a human is better at categorising the sites i.e. spurious sites may be eliminated.

We feel that the really useful directories are the more focused examples, such as <http://www.webdirectory.com> relating to environmental information. You can also appreciate that browsing through the tree structure of the directory can be time-consuming and will not automatically lead to a result.

ACTIVITY 3.6

There is a tremendous amount of information available at <http://searchenginewatch.com/> covering every conceivable aspect of information providing websites.

Have a look at this website for further tips.

An alternative approach is the use of Portals.

Using portals

A portal is, at its most general, a website which offers grouped links leading to information. General purpose portals, such as www.msn.co.uk or www.yahoo.com, are often used as home pages by users and have links to life style sites. These sorts of general portals are rarely of use in answering information enquiries.

Some more specialised portals are tailored to be used say, to provide a child friendly web experience (e.g.: <http://home.disney.co.uk/>) , as they give relative safety from inappropriate material.

Other specialised portals focus on particular topic areas and it is these which can save you time in answering reference enquiries.

ACTIVITY 3.7

Familiarise yourself with some of the portals which you can use in your information searching. Go to each portal listed below and get a feel for the information you could access through it.

- **DirectGov** at <http://www.direct.gov.uk/Homepage/fs/en>
- **Wine.Com** at <http://www.wine.com/>
- **Visit Scotland** at <http://www.visitscotland.com/>
- **Irish Abroad** at <http://www.irishabroad.com/>
- **Connects** at <http://www.connects.org.uk/>

There are thousands of portals. With experience you will get to know a number of useful ones for sourcing specific information.

Using bibliographic databases

Bibliographic databases permit the retrieval of information in a variety of formats and media. Some of these are commercial subscription services, e.g.: www.booksinprint.com. You must be aware which databases your library subscribes to. If you do not know this already, check it out now.

Other bibliographic databases which are free of charge include the catalogues of major libraries – such as the British Library's catalogues containing over 12 million books, serials, printed music and maps. University libraries usually have online catalogue access, as do public libraries. Booksellers' databases can also be useful sources of online bibliographic information.

ACTIVITY 3.8

Familiarise yourself with some of the bibliographic databases which you might use in your information searching: Go to each site listed below and get a feel for the information you could access through it.

- **British Library** at <http://www.bl.uk/>
- **Cardiff University Library** at <http://library.cf.ac.uk/>
- **Blackwell's** at <http://www.blackwell.co.uk/>

3.3.3 Frequently-used websites

It is useful to acquaint yourself with sites of major organisations which hold information relating to commonly asked enquiries. Examples are government departments, your own local authority, major voluntary organisations and organisations of local interest.

ACTIVITY 3.9

Familiarise yourself with some websites which will be important sources of information for you:

Locate the Government's **Home Office** website and find the telephone number for General Enquiries
Locate the website for your **local authority** and find a list of the local councillors
Locate the website for the **UK Citizens Advice Bureau** and find the location of your local bureau. Locate the website for your **nearest airport** and find a list of destinations flown to.

Now expand on this by thinking of other likely sources of specialised information and check out these websites for yourself.

Internal searches

As well as using search terms in search engines, you should notice that you can conduct a search within a website using the internal search facility provided by the site. A good example is the search facility within www.scottish.parliament.uk which permits searching by subject terms within specific areas of the site and for specified types of documents. This site has both simple and advanced search facilities.

Use the Advanced Search facility to find **debates in the chamber** which relate to **apprenticeships**.

3.3.4 Website suffixes

When you are looking at websites, it is useful have an understanding of implications of the common suffixes used in the addresses for websites (called URLs). Some suffixes give a clue about the nature of the organisation which owns the website. Note, however, that for some suffixes there is no absolute fixed rule for their use. Thus you would find that .gov.uk always indicates a local or national government site in the UK. By contrast, although .org

suggests a non profit-making organisation, there is no guarantee that this applies to every .org website.

Here is a list of common organisational suffixes and their meanings.

- **.ac** Academic
- **.biz** Business
- **.co** Commercial
- **.com** Commercial
- **.edu** Educational
- **.gov** Local or National Government
- **.int** International
- **.net** Network
- **.org** Non profit making

Geographical suffixes

There are also **geographical suffixes** with .uk for the United Kingdom and .ie for the Republic of Ireland. The United States is the only country which does not use a suffix. The .us suffix exists, but is seldom seen.

ACTIVITY 3.10

Go to <http://www.norid.no/domenenavnbasert/domreg.html> or another similar site and find the suffixes for Internet sites for the following countries:

- Australia
- Canada
- France
- Germany
- India
- Pakistan

3.4 1.3 Evaluate the results of the search

3.4.1 Validity of information

Information found on the Internet can sometimes be problematic. It is always important for the information professional to validate information found during a search, whether this results from printed or electronic sources. However, the information found in reference books and other printed materials in public libraries has usually undergone a rigorous selection process. Thus some of the validation of information has already taken place through the selection process.

This is not the case with Internet sites. Individuals or organisations can, at almost negligible cost, upload information to websites which are then accessible throughout the World. Such sites may present information which is out of date, biased to one point of view or just plainly

wrong. So all information found on the Internet must be critically evaluated. This is an important role for the information professional. Non-specialists are less likely to query the information found on the Internet – perhaps they assume that it has been vetted in some way, just like the reference books in our libraries.

There are three main criteria for validating information: **reliability , accuracy and currency .**

Reliability

There are a number of criteria which can be used to give you confidence in the **reliability of the information** on a website.

Before proceeding, list what you think are the criteria for establishing the reliability of a website.

Reliability criteria

We think that the following three points are very important:

- **the expertise and reputation of those connected with the website**
- **evidence of lack of bias**
- **evidence of equal emphasis towards all aspects of the search topic**

Expertise and reputation

If you can see that the website is supported by a reputable organisation or contributed to by a person with known expertise then it is reasonable to accept the website as being reliable. Examples would be where a website giving medical advice was run by a government department or a well respected charity e.g. **NHS direct** at <http://www.nhsdirect.nhs.uk/> or **Cancer Research UK** at <http://www.cancerresearchuk.org/>

Another more trivial example is that you would expect to find reliable recipes at **Delia Smith's** website <http://www.deliaonline.com/>

Lack of bias

Individuals can be **biased** in their opinions. Even well known experts may **represent only one aspect** of a topic.

Many websites by their very nature present information from only one viewpoint and are thus biased. While such information need not necessarily be excluded from the results presented to the client, you must indicate any identified bias and, if possible, provide information from other sources which present opposing points of view. This is particularly important when the client is seeking information on **potentially contentious matters** such as politics, religion, race or issues related to pressure groups.

ACTIVITY 4.1

As an exercise in looking for bias in websites, search for a pair of websites giving opposing points of view on the following topics.

- keeping a monkey as a house pet
- the need for the UK Monarchy
- the greenness of nuclear fuel
- the usefulness of homeopathy

Opposing views

The following example sites were available at the time of the latest review of this section.

- Opposing views on keeping a monkey as a house pet can be found at **Monkeyzone** <http://www.monkeyzone.com/> and at <http://www.aspca.org/adopt/adoption-tips/exotic-animals-pets> the website of **American Society for the Prevention of Cruelty to Animals**.
- Opposing views on the need for the **UK Monarchy** can be found at the official UK Monarchy site at <http://www.royal.gov.uk> and a Marxist perspective at <http://www.marxist.org.uk/>
- Opposing views on the greenness of nuclear fuel can be found at the **Greenpeace** website <http://www.greenpeace.org.uk/> and that of the **World Nuclear Association** <http://www.world-nuclear.org/>
- Opposing views on the usefulness of homeopathy at the site of the **British Homeopathic Association** at <http://www.trusthomeopathy.org/> and the **National Council Against Health Fraud (NCAHF)** Position Paper on Homeopathy found at <http://www.ncahf.org/pp/homeop.html>

Although the exercise and the results may seem a little trivial, it is useful. The problem when you are faced with queries about these sort of contentious issues is that you will initially retrieve a site as a result of your information search which gives only one side of the case. You must then search for the opposite, just as you have done here.

Equal emphasis

Emphasis differs from bias in that it is **omission of information** rather than deliberate over-statement of one point of view. For example, US sites may devote little space to British developments. Another pertinent example in UK public libraries is that sites for UK government departments may include information only for England on devolved issues.

You should be aware that **emphasis can be more difficult to detect than bias**. A solution is to apply the technique of **cross checking** with other sites on the same topic.

ACTIVITY 4.2

Look at the government website for the Department for Education <https://www.gov.uk/government/organisations/department-for-education>. Education is a devolved responsibility and thus varies considerably between the four UK nations. Much of the information on the DfES website applies only to England and sometimes Wales.

Compare the information about literacy strategy in schools with that given on:

- <http://www.deni.gov.uk> **Department of Education Northern Ireland**
- <http://www.scotland.gov.uk/topics/education> **Scottish Government Education and Training**
- <http://www.learning.wales.gov.uk> **Welsh Assembly Government Education and Skills**

Accuracy

When you are looking for factual information you can usually assume that a reliable site based on the points above will attempt to provide correct data. However, mistakes can be made and you should cross check data using more than one reliable site wherever possible.

Currency

In using the Internet you often come across websites which are seriously out of date. In fact some of them are actually abandoned and will never be updated again. When you use websites in your information searching, you must make sure that the information is current. Of course with a reference book you can look at the publication date. However for websites it is not just so easy.

Before proceeding, list some points you could look for on a website to establish its currency.

Establishing currency

We can think of a few possible ways of establishing the currency of a website. Obviously they depend on finding date information. This can be explicit:

- You can check the “**Last revised**” date on a website. This is usually found on the first screen. Note that this may only indicate the last time a change was made to a particular part of the website and that it does not imply that **all** the content was updated on that date.
- You can look to see how recent are the **publication dates** of the documents referred to on the site
- You can look out for **dates quoted** within text and make an estimate of currency
- You might find a “**Forthcoming events**” list where all dates should be in the future, or in the very recent past.

In the absence of any explicit date information you may need to look at Indirect methods of establishing currency

Indirect methods of establishing currency

If there are no actual dates mentioned, you will need to look for more subtle indications that the site is regularly updated.

- You can look for **regulations or laws** mentioned in the site and find their dates of introduction.
- You can look for the **names of institutions or Government departments**. These do change name and can be used to give a date range.
- You can look for the **names of personalities** involved in the topic which can show currency.
- Finally you can simply look for reference to **recent news items** which will date the site's information.

ACTIVITY 4.3

Look at <http://www.bbc.co.uk/comedy/littlebritain/> This is a reputable site and it clearly states whether the site has been recently updated.

3.4.2 Measuring the success of a search

At the start of the enquiry process, during the reference interview you should have determined clearly the client's requirements. At the end of the enquiry process you must review the results of the search against these requirements in order to check that the search has been fully successful.

In some cases you may not be able to fully satisfy the client's requirements. If this happens, the reasons for this must be explained to the client e.g.: information does not exist in the format specified. You should propose some **alternatives** if these are possible.

There are three main criteria, **sufficiency , format and language** .

Sufficiency

Is there **enough information or too much?** If it is a straightforward fact being sought then you should have no difficulty here. However for a more complex search you must make sure that you have not overdone the amount of data retrieved to prevent swamping the client and if necessary trim it a bit. Conversely you must check that you have supplied enough information. If the client suggests that more would be appreciated, you can indicate tactfully that you have provided what was asked for but offer to search further if required.

Format

Make sure that the client's requests for **particular formats** , such as text, print-out, e-mailed results, audio or video have been met with.

Language

You should make sure that the client's requests for information in a **particular language** have been followed.

3.4.3 Structuring and saving of search results

The raw data should be presented in a structured way which facilitates understanding by the client. In particular, it is important for the client to be informed of the **source(s)** of the information found.

For **simple searches**, the result is likely just to be a **short statement of fact**. Here all that is required is that the information is presented **clearly** and **unambiguously**. However simple the information, we do recommend that it is given to the client in writing and that you keep a copy. That way there can be no argument later about the results. And having a written record means that the client does not have to depend on their memory to recall the information.

For searches which result in a considerable amount of information, you should present the results in some sort of **logical order**. Different orders suit different types of enquiry.

Ordering results

You might adopt one or a combination of:

- **Following the progress of the search** – “First I looked at the Food Standards Agency site and this told me....., then I moved on to the Association of Farmers Markets where I found.... etc.
- **Geographical order** – grouping information from a country together
- **Chronological order** – to show how a topic developed
- **Alphabetical order** – if the result of the search is a list of references
- **By point of view** – information on one side of the argument, then the opposing side.

These are only some possibilities and you should not feel compelled to choose one of these. The important thing is that your structure for presenting the information suits the topic and is helpful to the client.

Bibliographic references

If the results of your search include **bibliographic references**, these should be quoted in a consistent and accepted style. You can find advice on this on the websites of most universities. A good example is Anglia Ruskin University <http://libweb.anglia.ac.uk/referencing/harvard.htm> or you could try the University of Warwick at http://www2.warwick.ac.uk/services/library/main/help/guidespublications/bib_cit/

It is important to realise that your search and its results represent useful work, which does not simply end when the results are handed over to the client. We can think of two straightforward cases where reference will be made to your work in the future.

Before proceeding write down two possible reasons for archiving searches for future use.

Archiving searches

Ignoring the possibility that the first client loses the data and wants another copy of it (this can happen!), the most likely scenario is that another client comes into the library and asks the very same query. Here, if you have stored the enquiry information properly, you can simply go to the search and produce a copy of the results.

In this case, the search results should be archived in such a way that the search can be retrieved by appropriate key terms. These will be subject key words.

Ideally the library should have a formal system for recording the results of **frequently asked questions**. You should be aware if your library service does this and, if so, make sure that you know how to add your information search results to this.

Frequently asked questions

One good example of a library database of frequently asked questions is Edinburgh University's "Previously AnsweRed Questions – PARQs".

ACTIVITY 4.4

Examine Edinburgh University's "Previously AnsweRed Questions – PARQs" site on <http://www.lib.ed.ac.uk/faqs/parqs.shtml> and find the answer to the question "How much did the Forth Bridge cost?"

We think you will agree that this facility is very easy to use. Note how, in addition to answering the questions, the site points the enquirer to further sources of information by means of hyperlinks.

If your library service does not have a formal service-wide system like this, you should consider setting up a simple version for yourself and colleagues at your service point. This is relatively simple to do using a database package available in your library.

Updating data

Another situation where you may wish to revisit your search is where the same client reappears and wants you to **repeat the enquiry** at a later point in order to **update the data or include new developments** which have taken place since the original search was undertaken.

In this case it is important to save not just the **search results** but also the **search strategy**. You will need to repeat the strategy in order to update the information found the first time.

You may find that certain enquiries have a habit of repeating at the same time each year. An example would be where pupils always undertake a school project on a particular topic at the beginning of each academic year. You know that every September a group of 12 year olds will descend on your library desperately seeking information on young people and drugs in the locality. In this case, you can even prepare yourself in advance by repeating your search **before** the question is posed, so that you are prepared to assist the young people with their information needs.

4 Supporting Reader Development

This page is designed for the use of students undertaking the **Level 7 PDA** (previously called Diploma) in **Applications of ICT in Libraries**.

This qualification was developed by the **Scottish Library and Information Council (SLIC)**¹ and are validated by the **Scottish Qualifications Authority (SQA)**²

Supporting Reader Development is an optional unit in the programme.

Information regarding the **background to the courses , content and certification opportunities** can be obtained by following the old (Diploma ICTL³) or Level 8 PDA (Advanced Diploma ICTL⁴) links.

Further information can be obtained from angela.lees@sqa.org.uk

1 <http://www.slainte.org.uk>

2 <http://www.sqa.org.uk>

3 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

4 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

5 Objectives of reader development

In recent years libraries have moved towards fostering reader development, a more reader-centred approach. A good definition of reader development is:

active intervention to:

- increase people's confidence and enjoyment of reading
- open up reading choices
- offer opportunities for people to share their reading experience
- raise the status of reading as a creative activity

(See <http://www.openingthebook.com/reader-centred-library>)

Add alternative definitions below.

6 Reader development techniques

Reader development is not about reading “better” books, in the sense that these are more worthy literary titles - the objective is that the reader relishes the reading experience and reads the books with a sense of satisfaction. Reader development can involve:

- reading promotions
- use of genres
- literacy initiatives
- reader centred selection skills

6.1 Reading promotion

It is important at the outset to distinguish between reading promotion and reader development.

A reading promotion aims to market a small number of titles while reader development sells the whole reading experience and what it can do for you, rather than promoting individual books or writers.

That said, however, reading promotions can still play an important role as part of a wider reader development programme, as they can alert readers to titles which they might otherwise remain unaware of.

Reading promotions may be local (within the library or local authority library service), national or even international. Reading promotions focus on small or moderate numbers of book titles which are grouped together and marketed as a list or reading pathway for the client group. This group might be adults, younger clients or clients with special needs or specific language requirements. Sometimes, language, subject or publisher links them together.

Although reading promotions are not reader-centred (their objective is to increase sales or issues), they do bring books to the attention of readers and may attract new readers because of their display and supporting print materials. Grouping books together in a promotion centres the reader’s attention on them and will lead to increased client use of this stock.

Activity: Find some examples of recent book promotions in which your library service has participated. Discuss with colleagues what was successful or unsuccessful about these promotions.

6.2 Current book promotions

There are so many book promotions that we could not attempt to give a comprehensive listing. However, here are three examples of current book promotions which could be applicable to public libraries, together with our comments on these. Maybe some of them were included in your list.

6.2.1 Richard and Judy's Summer Reads

<http://www.richardandjudybookclub.co.uk/>

Celebrities Richard and Judy promote reading through their Summer Reads and Book Club. Whilst this is a small range of titles, these titles receive a high profile in the media and outlets like supermarkets, bookshops, stations and airports. It is always important to be aware of what is in the media spotlight, as requests from clients will follow. Richard and Judy's titles are contemporary paperback fiction.

6.2.2 Welsh Book Council

<http://www.clrc.org.uk/hafan-home>

This website promotes access to books by Welsh publishers and contains useful reading suggestions for readers. It is important that local/national authors and publishers are promoted to encourage and sustain the growth and development of the local/national cultural industry. In addition Welsh/Gaelic language material should be made available to meet the needs of readers.

6.2.3 Mills and Boon

<http://www.millsandboon.co.uk>

Mills and Boon publishers are well known for their range of romantic fiction. Their website includes a large number of titles but it will only appeal to a limited group of readers and has a commercial rather than reader-centred objective.

7 Genre

A genre is a “family” group of books which share style, form, or content, e.g.: crime fiction.

Activity: List other fiction genres which are common in public libraries.

7.1 Fiction genres

When you look round any bookshop or library, you see that it is possible to group fiction into many genres. New genres emerge all the time – a few years ago, for instance, “chick lit” was unheard of; now it is one of the best selling fiction genres. The most common fiction genre groupings are:

- literary fiction
- crime
- romance
- fantasy and sci-fi
- blockbusters
- historical
- short stories
- westerns
- defined by country, e.g.: Canadian literature

7.2 Arranging collections by genre

Many libraries organise part of their fiction collection by genre and the identifying spine labels for the different genres (e.g.: a gun for crime) will be familiar to many library clients. Libraries do this to help clients who habitually read, for example, crime novels. This means that clients regularly go to the same area of stock for their reading material and can miss out on wider reading choices.

Some might argue that arranging the non-fiction stock using a classification system removes the need for genres in this area of the library. However, many libraries use genres for some of their non-fiction stock. Common examples are biographies and travel books.

For the client who is completely focused on one genre it is undoubtedly helpful if they find all the books in this genre in one place in the library. But the disadvantage of this approach is that it can discourage more adventurous reading.

The client may never look beyond the few shelves which contain the selection of “his/her books”, even though other books elsewhere could be of interest to them. While some clients

Genre

will always limit their reading choices to a particular genre, others can, with support, can be led to enjoy reading across a wider range.

8 Literacy initiatives

Literacy initiatives can make a significant contribution to reader development. Such initiatives exist at both local and national level.

There are many literacy initiatives related to education. These include the **National Literacy Strategy**, **National Priorities for Education** and **Literacy Hour**.

The ability to read fluently is an important life skill and opens doors to better job prospects, improved economic prospects and more leisure choices. In the UK, the issues are about low levels of literacy rather than illiteracy, but **23% of adults in the UK struggle with basic literacy**.

The website of the **National Literacy Trust**, <http://www.literacytrust.org.uk> has lots of statistical information. Good functional literacy is important to the well being of individuals as well as the economy of the country and reading/writing abilities are essential for everyday tasks such as writing shopping lists, texting and using medicines properly.

Government initiatives to improve literacy in education include the introduction of the **Literacy Hour**. The **National Literacy Trust** was established in 1993 to improve skills, confidence and pleasure in reading. The NLT goes wider than formal education and there are well-developed national networks for Adult Literacy and Numeracy support and development.

Activity: Go to http://www.literacytrust.org.uk/projects_networks and look at the details of the latest literacy initiatives applicable to libraries. Choose those of interest to your own library service and consider how you could use them as part of reader development.

8.1 Examples of literacy initiatives

In England, the **The Reading Agency** brings libraries and adult literacy together in partnership and promotions include **Got Kids? Get Reading!** and **First Choice**.

The Reading Agency runs an annual literacy initiative - the 'Six Books Challenge' aimed at adults and learners in further education.

You can find out more at <http://readingagency.org.uk/adults/quick-guides/six-book-challenge/>

In Scotland, the **Big Plus** brand promotes adult literacy and numeracy. There is a partnership between **Communities Scotland's Learning Connections** and libraries which is developing projects, collections and providing training.

http://www.thebigplus.com/about/About_The_Big_Plus

Activity: Browse through the following literacy related websites for younger clients. Do any of them have activities which you could link into or adapt for your library service? Note: most of these sites give links to other related sites which may also provide you with inspiration.

The Child Literacy Centre <http://www.childliteracy.com>

My home library <http://www.myhomelibrary.org>

9 Reader-centred stock selection

When choosing stock it is important that you consider the reading preferences of clients. Using reader-centred selection skills in general stock selection is good practice. You will keep your clients' reading preferences in mind as you take account of current demands, gaps in stock, levels and formats of stock and the condition and currency of stock. You may need to think about developing specific areas of stock. You may also need to select specific items or generate lists for individual clients and their meeting their needs should be the focus.

Later we'll discuss what is involved in carrying out an interview with the client to establish their reading history and preferences and in building a reader-profile. Following on from that you will draw on your knowledge of the reading resources available in order to develop a reader-centred list or pathway. Here we discuss some of the resources which are available to assist you in stock selection.

Activity: Make a list of the range of resources which are available to you when you are selecting stock to recommend to a reader whose reader-profile you have established. Remember you can be accessing stock which already exists in your library service or you may be ordering new stock for the client.

9.1 Resources

For stock within your library service you will use the library catalogue and themed lists such as the Quick Reads collection for emergent readers:

<http://www.quickreads.org.uk/>

To identify new stock you can use online sources – there are many online selection tools which are useful in locating resources which your own service does not have. Examples include:

Scottish Bibliographies Online: <http://www.scotlandsulture.org/sbo/sbo.htm>

Which Book¹ - for widening fiction choice (with reviews from library staff)

Other resources for assisting in stock selection include:

- catalogues of other libraries
- bibliographies
- review journals
- publishers' lists
- pre-publication lists

¹ <http://www.openingthebook.com/whichbook/>

- specialist suppliers
- showroom and bookshop visits
- trade publications

9.1.1 Library catalogues

Online library catalogues can assist you in your search for appropriate material. Most UK library catalogues can be searched via the Internet.

The UK Public Libraries Page <http://dspace.dial.pipex.com/town/square/ac940/weblibs.html> is a useful resource, linking to the web-available catalogues.

Some services “clump” together the catalogues of several libraries. A single-search interface is used to cross-search multiple catalogues in a single search action, such as <http://www.ni-libraries.net/> for Northern Ireland or CatCymru for Wales <http://library.wales.org/catcymru/>

9.1.2 Bibliographies

A bibliography is a list of materials on a particular subject or by a particular author.

The publication, in either printed or electronic format, is usually arranged by author, date or subject, and provides information such as author, title, publisher and date of publication. This can then be used to identify sources and place orders for clients.

Activity: Find out which bibliographies are held in hard copy in your library service and consider how each might be of use to you for reader-centred stock selection.

9.1.3 Review journals

Review journals offer more information about books, articles or research than is found in bibliographies. A review will summarise the contents and make an evaluative statement about its contribution within its context. Good examples include newspapers such as:

The Sunday Times <http://www.timesonline.co.uk>

The Guardian <http://www.guardian.co.uk/>

Remember though, however respected the journal or reviewer, reviews are the views of one individual and so need to be evaluated carefully.

9.1.4 Publishers' lists

Publisher's websites and lists offer useful information. Caution must be exercised when using these to select material as publishers and booksellers have a commercial imperative. So you must always apply your selection criteria.

Books from Scotland (<http://www.booksfromscotland.com>) is supported by Publishing Scotland's website and highlights new books as does their Facebook page (<http://www.BooksFromScotland.com>).

facebook.com/pages/BooksfromScotlandcom/28776550495) and Twitter feed ([http://twitter.com/scottishbooks](https://twitter.com/scottishbooks)). They also have an RSS news feed.

9.1.5 Pre-publication lists

These lists offer useful information about forthcoming publications.

However, library staff know that they must be especially careful when using information from pre-publication lists as these lists may be produced many months before an item is actually published. In the interval between the pre-publication list and the actual publication of the item, the date of publication, length, format and price may change.

9.1.6 Specialist suppliers

Specialist suppliers are used to ensure that range and depth is developed within collections. This might be a particular interest, specialist language material, dual language material, or alternative formats such as Braille or for emergent readers.

9.1.7 Showroom and bookshop visits

Visits to showrooms and bookshops offer the opportunity to browse through the books. The downsides are that the range is limited to what is available in stock and that it takes considerable time and travel to select from a wide range of stock effectively and efficiently.

9.1.8 Trade publications

The Bookseller is a weekly trade publication, which lists new publications and forthcoming titles <http://www.thebookseller.com>

10 Supporting Client Learning

This page is designed for the use of students undertaking the **Diploma** (Diploma ICTL¹) or the **Advanced Diploma** (Advanced Diploma ICTL²) in **Applications of ICT in Libraries**.

These qualifications were developed by the **Scottish Library and Information Council (SLIC)**³ and are validated by the **Scottish Qualifications Authority (SQA)**⁴

Supporting Client Learning is a core unit in both the Diploma and Advanced Diploma programmes.

Information regarding the **background to the courses**, **content** and **certification opportunities** can be obtained by following the **Diploma** (Diploma ICTL⁵) or the **Advanced Diploma** (Advanced Diploma ICTL⁶) links.

Further information can be obtained from angela.lees@sqa.org.uk

10.1 ICT competence and learning goals

10.1.1 Establishing client competence in use of hardware and software

The client's **ICT competence** clearly affects their ability to use any learning packages available. If ICT skills are lacking, the client may have to undertake some **ICT skills development** before moving onto their selected learning package. You should determine the client's ICT competence in relation to both **hardware** and **software**.

Your initial task is to find out what sorts of **previous experience** and **competence** the client has had with ICT. Typically you might want to explore four areas:

- **hardware**
- **operating system environment (normally Windows)**
- **using the Internet**
- **using applications packages**

1 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

2 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

3 <http://www.slainte.org.uk>

4 <http://www.sqa.org.uk>

5 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

6 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

ACTIVITY 1.1

Before proceeding:

- List the hardware items you would enquire about.
- Note down what you would want to know about each of these items.

Client competence in using hardware

The main items of hardware which the client is likely to have to use are the:

- **mouse**
- **keyboard**
- **printer**
- **scanner**
- **removable media**

We look at each of these in turn, giving some specific pointers about what you should ask the client.

The mouse

You might want to start by finding out the following information:

- Has the client used a mouse?
- Is the client aware of the use of the **left and right buttons** ?
- Is the client aware of **hovering** over items?
- (For left handed clients) is the client aware of how to change a mouse from right- to **left-handed** operation?
- If the computers in your library use **another type of pointing device** , such as a tracker ball or touch pad, can the client use this proficiently?

Keyboard

You might want to start by finding out the following information:

- Has the client used a keyboard?
- Does the client know how to use:
 - **space and return keys**
 - **shift and caps lock keys**
 - **delete and backspace keys**
 - **cursor (arrow) keys**
 - **ctrl, tab, esc and insert keys**
 - **function keys**

Printer

You might want to start by finding out the following information:

- Has the client used a printer?
- Is the client aware of any printer processes which are **specific to your library**?
- Can the client **load the printer with paper** ?
- Is the client aware of the **cost per page** of printing (monochrome and colour)?

Scanner

You might want to start by finding out the following information:

- Has the client used a scanner?
- Is the client aware of the routine of pre-scan, select area and scan?
- Is the client aware of the importance of selecting an appropriate scanning resolution?

Removable media

Use of removable media, such as floppy disks, CD-ROMs and USB storage (also known as Flash Drives or Pen Drives) will be governed by library rules. If these are allowed you might want to start by finding out the following information:

- Can the client **insert a disk** (or other media) properly?
- Is the client aware of when it is appropriate to **remove** it?
- Can the client access media in **different drives** ?
- Can the client save to **writable media** ?

Operating systems

We use the term **operating system** to describe the basic software, such as **Microsoft Windows**, which makes the computer work. When a computer is switched on, the operating system starts running before any application package such as Word will run. The operating system involves **managing applications and data**.

ACTIVITY 1.2

Before proceeding:

- List the aspects of the operating system you would enquire about.
- Note down what would you want to know about each aspect.

Previous experience

You might want to start by finding out the following information:

- Is the client **familiar with the operating system** on the computers in your library?

Note that, even within the same library, different computers may have different operating systems. Most of the common operating systems are supplied by Microsoft:

- Windows 98
- Windows NT
- Windows 2000
- Windows Millennium
- Windows XP

There are some significant differences in the practical operation of these, so you should determine whether the client can carry out the tasks we outline below for the operating system on the computer which will be used to work through the chosen learning packages.

Operating system tasks

You might want to start by finding out the following information:

Finding applications:

- Does the client know **where to look** for the applications or packages?
- Does the client know the **names and icons** for the applications required?

Opening and closing applications:

- Can the client **open** an application?
- Can the client **close** an application correctly? (This often involves saving information.)

Using a file manager to locate files and data:

- Can the client use **My Documents/Windows Explorer** to navigate around the file system?
- Is the client aware of the concept of a **hierarchy** or tree structure of folders (directories)?

Creating folders and saving data in specific folders:

- Can the client **create a new folder** to save application data?

Using the Internet

A great deal of information to support learning as well as complete learning packages can be accessed via the Internet. It is therefore important to gauge the client's competence in Internet use.

ACTIVTY 1.3

Before proceeding:

- List the aspects of Internet use you would enquire about.
- Note down what you want to know about each aspect.

Common Internet tasks

Here are the main aspects of **basic Internet use** which you should ask about:

Browsing the Internet:

- Has the client experience of **using a browser** ? (e.g.: Internet Explorer, Mozilla, Firefox)
- Has the client experience of **using a search engine** ? (e.g.: Google, Ask Jeeves)
- Is the client aware of the variable quality of websites found on the Internet?

E-mail:

- Has the client used **e-mail** ?
- Does the client have an **e-mail address** ?

Chat:

- Has the client used **chat** ?
- Is the client aware of **possible dangers** in its use?

Groups:

- Has the client used any (**news)groups** ?

Using applications packages

You need to know about the client's existing experience with common applications packages. This will help to confirm the information gleaned so far.

ACTIVITY 1.4

Before proceeding, list some applications packages you might want to ask about.

Applications packages

Word processing is the most likely example of an applications package. Almost all computer users will have done some word processing. But many will have used other packages as well.

Word processing packages

- Has the client used a **word processor** ? (e.g.: Word, Write)

Spreadsheet packages

- Has the client used a **spreadsheet application** ? (e.g.: Excel)

Photo/Graphics packages

- Has the client used a **photo/graphics package** ? (e.g.: Paint Shop Pro, Photoshop)

Database packages

- Has the client used a **database application** ? (e.g.: Access, dBASE)

Financial packages

- Has the client used a **financial package** ? (e.g.: Quicken, Quick Books)

Other

- Has the client used any other, **more specialised packages** which do not fit into the above categories? If so, what are these packages and what do they do?

In each case you should try to get an idea of the **level** at which the packages have been used. The best way of finding this out is to ask the client to give some **examples** of how they used the package.

Using learning packages

One important question to ask is whether the client wishes to use the chosen learning package **in the library** , using the library's equipment, or whether they would prefer to take the package away for **home** use.

If the latter, it is vital that you establish the **specification** of their home computer. While many home users possess high specification equipment, others may have older, slower models which will not support the latest packages. This can be a particular problem where **graphics or audio** is involved.

All learning packages will state clearly the **minimum specification** on which the application will run and you should ask the client to confirm that their home equipment meets or exceeds this.

It is good practice to make a **written record** of what you have established about the client's ICT competence. Some libraries have checklists for this purpose.

ACTIVITY 1.5

Find out if your library service has checklists of this nature. If not, why not create one for yourself and your colleagues to use?

Establishing learning goals

You need to **establish the learning goals** for the client before you can think about possible learning approaches. The client may have learning goals related to their **work** or to their **personal life** . You should attempt to establish exactly what the client wishes to learn and if possible get an idea of the reasons why the client is undertaking the learning.

Some clients may come to the public library seeking learning packages which are **complete in themselves**. You may be able to provide such packages “off the shelf” in your library or you may have to source them from elsewhere.

Other clients may be seeking additional learning to support training or education being **undertaken elsewhere**. The most obvious example of the latter is school pupils or college/university students wishing assistance with assignments or desiring materials which will help them revise for examinations.

Clients engaged in more **informal learning** may also require top-up materials. For example, an adult working through a self-help book on word processing might ask for additional exercises in keyboarding.

ACTIVITY 1.6

Before proceeding outline the different areas you would need to ask about to find out the client’s learning goals. There are quite a few of them!

Determining learning goals

Here are some possible areas to look at with the client to determine the learning goals:

General subject area:

What is the **general subject area** in which the client wishes to undertake the learning?
E.g.: the Spanish language.

Slant or specialism:

Is there a **particular specialism** to this learning? E.g.: Spanish for business.

Existing competence of client:

Does the client possess any existing relevant competence in the subject? E.g.: the client has picked up a basic knowledge while living in Spain for six months last year.

Future competence as a result of the learning undertaken:

What **level** does the client wish to be able to reach as a result of the learning? E.g.: the client wishes to write business letters to Spanish clients of their company.

Reasons for learning:

Is there a particular work or social **reason** the client has for wishing to undertake the learning? E.g.: the client is soon to take responsibility for their company’s Spanish clients

Additional factors

You may need to consider the following additional factors:

Timeframe:

Over what **time period** does the client wish the learning to take place? E.g.: the next six months.

Time available:

How much time in the week does the client have for learning? E.g.: up to four hours per week.

Importance of certification:

Does the client particularly want to undertake learning which will result in a **qualification**? E.g.: the client is interested in gaining a City & Guilds qualification in Business Spanish on completion of the learning.

Finance:

Many of the learning materials available through public libraries will have no costs attached. However some may involve **enrollment or certification fees**. In these cases, you must tactfully investigate if the client would have the financial resources for a course of study with a fee associated? E.g.: is the client able and/or willing to pay for an end of course examination fee?

It is good practice to make a **written record** of what you have established about the client's learning goals. Some libraries have checklists for this purpose.

ACTIVITY 1.7

Find out if your library service has checklists of this nature. If not, why not create some for yourself and your colleagues to use?

10.1.2 The UK education and training system

In order to help your clients, you need to have a broad-based understanding of the **UK education and training system** as a whole - **pre-school, primary, secondary, tertiary, workplace and informal**. Naturally you are not expected to be an expert on education and training (although in some instances you may need to consult such experts). However you should be familiar with the basics of the system and know how to find out more detail on any aspect, if this is required.

Remember that we live in an age of **lifelong learning** and that much learning takes place outside the traditional academic system. So you should make sure that you know not just the local schools, colleges and universities, but also private training providers, adult learning agencies, voluntary groups etc.

In particular, it is essential that you appreciate the ways in which the education and training systems of the four UK nations differ from one another (the Scottish system displays the largest divergences from the others) and the implications of this for the client.

ACTIVITY 1.8

Here are the official government websites for the education departments in England, Northern Ireland, Scotland and Wales:

- England: <http://www.dcsf.gov.uk/>
- Northern Ireland: <http://www.deni.gov.uk/> and <http://www.delni.gov.uk/>
- Scotland: <http://www.scotland.gov.uk/Topics/Education/>
- Wales: <http://www.learning.wales.gov.uk/>

Familiarize yourself with the information provided on these sites, especially that related to the country in which you are resident. Note that much of the information on the English site applies also to Wales and some is also applicable to Northern Ireland. Each of these sites provides links to sites giving information on more specialised aspects of education. Note the addresses of such sites which are particularly relevant to yourself and summarise the sort of information which you can gain from them.

10.1.3 Ascertaining special needs

You should establish any special needs (in the widest sense) of the client which will have a bearing on the learning they are proposing to undertake.

ACTIVITY 1.9

Before proceeding:

- Make a list of the different types of special needs which could have a bearing on the learning.
- For each case note the steps you can take to enable the learning.

Types of special needs

It is difficult to compile a comprehensive list of special needs. Here are some of the most common with some suggestions as to how the library can facilitate learning for such clients.

- **Motor disabilities**
- **Visual impairment**
- **Hearing impairment**
- **Special learning needs** (including literacy, numeracy and English as a second language)

Motor disabilities

This can cover a wide range of disabilities, ranging from a paraplegic learner in a wheelchair to someone with mild Repetitive Strain Injury (RSI). Some common examples of library facilities for this group are:

- a **flexible computer desk** at a height which can be adjusted to suit varying dimensions of wheelchairs

- a **joystick or specially adapted mouse** for clients who cannot operate a standard mouse
- a **specialised “big keys” keyboard** etc. for clients who cannot operate a standard keyboard
- a **mouse tray** so that clients can use the mouse on their lap
- **touch screens**
- **programmable keypads** to reduce the number of keystrokes required for common inputs

Visual impairment

Many manufacturers produce software specifically to enable use by **visually impaired users**. It is possible for the **users** to hear what appears on the screen. Some software produces output in **Braille**.

Sometimes **simple measures** can be effective in facilitating use by visually impaired clients, such as:

- changing the **text size** on the screen
- altering the **colour settings** (It is usually easiest for clients with visual impairments to read black text on a white background)
- using “**text only**” versions where graphics are removed.



ACTIVITY 1.10

Make sure that you can carry out the three “simple measures” listed above.

Useful information can be found on the website of the **Royal National Institution for the Blind**. Go to <http://www.rnib.org.uk/> and search for “internet”.

Hearing impairment

Again much **specialist software** is available. Libraries can install systems which pick up sound from the computer through an amplifier and radio microphone which is then transmitted by infrared around the room. The hearing impaired person hears this amplified sound through a lightweight headset. There is no need for users to wear their hearing aids.

<http://www.deafclub.co.uk> is a useful site with a search engine, which is specifically designed to help deaf people find information. It can also lists sites giving advice on ICT adaptations for clients with hearing impairment.

<http://www.rnid.org.uk/> is the site of the Royal National Institute for Deaf People.

Special learning needs

Public libraries have always played an important role in assisting clients in these groups and recent **disability and discrimination legislation** has laid even more emphasis on this role.

Research has shown that libraries are often viewed by such clients as **friendly, non-judgmental environments**. In consequence they may be more likely to undertake learning in the library than in the more formal setting of a school or college.

Your library service will have staff who specialise in assisting these user groups. These colleagues can advise you of how best to provide for individual clients.

You should be aware that nowadays, there are many **holistic learning packages** which provide upskilling for young people or adults in literacy, numeracy and ICT.

Remember that, although the word processor's **spell checking facility** is designed primarily to check for typing errors, it is an invaluable aid to anyone with problems in coping with the English language's idiosyncratic spelling.

10.1.4 Sources of careers information

In order to match the client's learning desires with work goals, it may be necessary to have information about which **workplace qualifications and competences** are useful in a particular job role or career. You are not expected to know this information but you should to be able to access it efficiently, most probably by use of the Internet.

ACTIVITY 1.11

Before proceeding, find websites which will give you information on the following careers:

- nursing
- clockmaking
- actuarial work
- farriery

Careers information sites

There are several different sites which will produce the required information. There is usually a dedicated site for each **sector of employment**.

Here are some examples for the jobs we asked about:

Nursing

An NHS site <http://www.nhscareers.nhs.uk/careers/nursing/>

Clockmaking

The British Horological Institute <http://www.bhi.co.uk/>

Actuarial work

Prospects the graduate careers website has a section at: http://www.prospects.ac.uk/cms>ShowPage/Home_page/Explore_types_of_jobs/Types_of_Job/p!eipaL?state=showocc&idno=329&pageno=1

Farriery

The Farriers Registration Council has a section on careers at: <http://www.farrier-reg.gov.uk/>

General careers information

There are several useful on-line sources of general careers information, such as:

- For England <http://www.connexions-direct.com>
- For Scotland <http://www.careers-scotland.org.uk>
- For Wales <http://www.careerswales.com/>
- For the whole of the UK <http://www.careers-gateway.co.uk>

Web 2.0 sources University of Glamorgan YouTube <http://www.youtube.com/careersglamorganuni> Foreign and Commonwealth Office Twitter links <http://web.archive.org/20090804213504/www.fco.gov.uk/en/twitter/> Energy careers on Facebook <http://www.careerenergy.co.uk/?facebook> CILIP Graduate Trainee Opportunities on Facebook <http://www.facebook.com/group.php?gid=13484212748&ref=nf>

10.2 Select a range of ICT-based packages to support learning

10.2.1 Selection criteria

You must take all the information obtained from the client into account so that you can **identify learning packages** which will meet the criteria. You will match learning packages against such criteria as:

- Does the **subject matter** match the client's desired study topic?
- Is **certification** available if the client desires this?
- Does the **length** of the learning package fit with the time available for the client to learn?
- Can the client afford any **costs** associated with the learning?
- Does the learning package address any **special needs** of the client?
- Is the level of the learning suitable in terms of both **starting competence** (i.e.: neither too easy nor too difficult) and **final competence** achieved at the end of learning?
- Can the client undertake this learning without enhancement of their existing ICT skills? If not, can the library supply additional support for **ICT skills development** in order to enable the client to undertake the chosen learning package?

10.2.2 Learning packages available within own organisation

You need to be aware of the range of learning packages which are available within your own library service. Some of these will be at your own service point. Others will be held elsewhere within the service.

The library catalogue will give information about the learning packages, both in your own library and elsewhere. Some libraries produce **specific catalogues** or lists of ICT learning packages, giving more details than might be found in the general catalogue. For packages at your own service point, it is also useful to examine the packages themselves and, if time permits, you can actually test them out.

ACTIVITY 2.1

Familiarise yourself with all the catalogues and lists of ICT learning packages in your library service. Note what sort of information they provide for each item.

Restrictions on the use of learning packages

You must be able to determine any restrictions on the use of ICT learning packages, e.g.:

- Must the package be used on **library premises** or is it available for **home use** ?
- Is there a limit to the **number of hours** a client may book to use the package in the library or on the length of time a package can be borrowed?
- If the packages are to be used in the client's home it is vital for you to establish the details of the **client's own computer** in order to be sure that the specification is high enough to support the chosen learning package.

When working in this area you will pick up useful information through the experience and comments of clients. If several clients recommend a particular package on keyboarding techniques, for instance, you can feel confident in recommending it to other clients with similar learning goals. Additionally you can gain information and advice through discussions with experienced colleagues.

ACTIVITY 2.2

Here is an exercise to familiarise yourself with some learning packages available within your own library service. For each subject area given below, find two packages and note the differences between them:

- Business studies
- French language
- Basic mathematics
- Word processing

10.2.3 Sourcing learning packages outside own organisation

Your library cannot duplicate all the learning packages which will exist locally outside your library service. You must have an awareness of what is available out there.

ACTIVITY 2.3

Before proceeding make a list of the types of organisation in your locality which produce and/or deliver learning packages.

Sources of learning packages

Here are some examples of where learning might be found in the locality:

- Schools
- Further education colleges
- Universities
- Private trainers
- Local learning partnerships
- Community learning
- Voluntary organisations , e.g.: Workers' Educational Association



ACTIVITY 2.4

Here is an exercise to increase your familiarity with local sources of learning material outside the library service.

Choose four of the types of provider given in the preceding list. For each type, find the website of a named organisation in this category and choose two different study packages offered. Note the differences between the packages at each organisation and the differences between the organisations.

Differences between sources

We expect that you will find the following points of difference:

- Cost of package (if any)
- Flexibility of study times
- Availability of certification

- **Level of studies**
- **Range of content**

In fact, you should come up with the very points which might be criteria gleaned from a client seeking learning.

With e-learning it is not necessary for the provider to be local. Much excellent learning content can be sourced free of charge from the Internet e.g.: <http://www.studyspanish.com> offers free tuition in basic Spanish. In other cases e-learning may be delivered via the Internet for a fee. In these cases a **log in** and **password** will be required after registration.

ACTIVITY 2.5

Before proceeding, find and note down five websites where learning is available on the Internet.

10.2.4 Learning on the Internet

Learning can be found on the Web at many, many sites. There is no way that you will be able to remember even a fraction of these. So it is extremely important that you should be familiar with sites which are commonly used to **find learning resources**. Check these sites frequently for news and developments, as their content is regularly updated.

It is important to be aware of the scope of any such site. It is often the case that learning sites which appear to be **UK-wide** are not in fact applicable to one or more of the four nations. Frequently, learning sites apply to England, Wales and Northern Ireland (e.g.: <http://www.learndirect.co.uk>) and there is a separate site for Scotland (e.g.: <http://www.myworldofwork.co.uk>)

The scope is not always obvious from the title of the site. Be especially careful when the word "national" is used. This can mean UK or a single one of the four UK nations. For example, the content of the National Learning Network (<http://www.nln.ac.uk>) applies only to England. In contrast, the content of the **National Learning Network** (<http://www.nln.ac.uk>) applies only to England.

BBC learning materials

The BBC (<http://www.bbc.co.uk>) offers excellent learning materials most of which are applicable in all four UK nations. This site also provides links to **other providers** of on-line learning.

There are many websites which are specifically designed to provide **curriculum related resources and revision aids**. Once again it is vital to check that these are appropriate for the school or college curriculum of the UK nation where the client is studying. The

BBC's site (<http://www.bbc.co.uk>) has educational and revision material for England, Northern Ireland, Scotland and Wales.

You should be familiar with websites applicable to your own home nation's educational curriculum, such as Learning and Teaching Scotland (<http://www.ltscotland.org.uk>). However, do not consider that support learning should be confined to these educational web sites. Rather be prepared to assist clients to find appropriate support material for their learning from any suitable Internet source. This applies especially when the client is seeking information to **enhance a course** of study undertaken elsewhere. They may come to the library looking for company financial performance data to include in a presentation on marketing, literary criticism of T S Eliot for a university essay or information on the breeding habits of dolphins for A level biology.

This sort of information in support of learning will probably be found on websites which are not specifically educational. So be prepared to assist your client to find information in support of their learning from **any appropriate Internet** source.

10.2.5 Devising a learning plan

You can give the client additional help in the form of a motivational learning plan to guide the learner through the package(s) you have sourced.



ACTIVITY 2.6

Before proceeding, make a list of points which you might include in the plan.

Contents of a learning plan

A suitable set of features to be included in the learning plan is:

- the overall learning goal
- specific learning objectives which contribute to the learning goal
- a deadline for completion of the learning
- a schedule for learning
- any support which the library staff have agreed to provide for the client
- a specification of the responsibilities and involvement of any outside provider

The learning plan is best expressed in SMART (Specific, Measurable, Achievable, Realistic, Timebound) objectives. It need not be a complex piece of documentation. Often it can simply be a checklist.

This plan should be created with and agreed by the client. Usually it will be signed by both the client and a member of library staff.

The use of such a learning plan avoids confusion and can also be motivating to the learner. Where the client is returning to learning after a gap, or has had prior negative learning experiences, it can be helpful to break the learning into “bite sized chunks” and produce a series of shorter learning plans. Thus the client has a positive experience of successfully completing a small amount of learning which engenders a sense of achievement and spurs them on to further efforts.

Example of a learning plan

Figure 37

10.2.6 Progression opportunities

An important role of the public library is to be a key player in lifelong learning. A **positive learning experience** provided by the library can lead to further successful progression for the client, in some cases into formal tertiary or workplace vocational education. The library user who enquires about opportunities to study Spanish language to further her career in retail sales may eventually undertake a university course in business and retail management.

ACTIVITY 2.7

Before proceeding note down how you might explore progression opportunities for a client.

Exploring progression opportunities

You could explore the following possibilities:

- What has been the **client's experience** with the learning undertaken so far? Have they enjoyed it? What was particularly enjoyable or useful and what was less so?
- Revisit the client's **original reasons** for undertaking the learning. Are these motivations still the same or has the experience of learning awakened the client's ambition to broader horizons? It is not uncommon, for example, for a learner who has embarked on a short language package, with a view to being able to order food and ask directions on holiday, to be seized with enthusiasm and wish to carry on to GCSE or Standard Grade qualifications in the language. Based on this discussion you can consider any or all or the following:
 - • Is there a **more advanced package** on this topic available?
 - • Are there packages on **related topics** to that being undertaken by the client?

- • Has the client come to the end of the possible informal learning on the topic and might now proceed to **formal education** ?
- • Which further learning will further **enhance the client's job prospects** after the present studies?

Of course, all of the previously mentioned sources of information on learning provision are useful to you not only in **sourcing learning** which is appropriate for the client's immediate learning goals but also to **suggest further learning options** to the client, on completion of the initial learning. In other words, at its simplest, when you are sourcing learning material, you should always have your eye on the level above, to see how your client might further progress.

Concluding the learning experience

Hopefully the learning has been a **positive experience** for the client and they are interested in taking things further. But do not be discouraged if the client does not want to sign up for further learning immediately. It may be that the learning just completed has achieved all the client's current goals and they wish to pause at this point meantime. This is a **satisfactory outcome** because you can be sure that a satisfied client who has found the package stimulating and relevant is likely to return to the library in future looking for advice and guidance on other learning.

10.3 Provide appropriate ICT support to the client

10.3.1 Using in-house learning packs to develop ICT skills

Most public library services have a wealth of **in-house learning packs** whose aim is to develop ICT skills, ranging from beginner to advanced level. You should examine the packages in your library so that you are completely familiar with their **content** and **level**. This enables you to make the most informed choice when recommending a package to a client and to be absolutely confident that the client will benefit from it.

ACTIVITY 3.1

Select three in-house packages which develop basic ICT skills such as:

- Using PC hardware
- Using files and folders (directories)
- Using the Internet
- Keyboarding skills

Try out each of the three packages to evaluate:

- Level (absolute beginner to expert user)
- Duration (how many hours to work through whole package)
- Approach (friendly to overly formal)
- Ease of use

- Presentation (is it attractive and encouraging for the learner?)

10.3.2 Front-line client support

When a client is using any ICT based learning package in the library, whether to develop ICT skills or for other learning, it is likely that from time to time some **technical snags** will arise.

You must be able to assist with straightforward trouble shooting e.g.: printing problems. We stress the word “straightforward”. There is no suggestion that you should possess sophisticated trouble shooting skills: this is the responsibility of ICT technical staff. Rather you should be acquainted with typical, straightforward difficulties which can arise and be able to suggest how these can be overcome.

Do be clear about the **boundary** between your responsibilities regarding trouble-shooting and when to call on the services of a technical professional.

You probably have had experience of this already.

ACTIVITY 3.2

Before proceeding, note down a few possible problems which may be encountered by clients using computers. (If this is outside your own experience ask colleagues to suggest computer problems they have solved for clients.)

10.3.3 Typical problems

Here are some of the problems you are most likely to encounter.

- The monitor **appears blank**
- After using the computer for some time, it '**hangs'**, neither keyboard nor mouse appear to operate
- A client has difficulty reading off the monitor because the **print is too small**
- **Nothing** comes out of the printer
- The printer does not seem to use the whole of the sheet of paper and the **layout** is not the same as on the monitor
- When saving data from an Office application like Word, the message comes up that the **disk is full**
- The printer **jams**



ACTIVITY 3.3

Before proceeding, jot down any ideas you have about the help you would be able to give in each of the above cases. You can compare this with our suggestions on the following screens.

You will find that with experience and in discussion with your colleagues you will build up a fund of solutions for these types of problem.

Once again, as in Outcome 2, you must take full cognisance of any special needs of the client and offer appropriate technical support to address these.

Resolving problems

Some of our solutions are based on your ability to **change computer settings**. It may be that you do not have access rights to these and would need to contact an ICT professional.

Note that with the first two faults (monitor blank, computer hanging), if they require forcing an application to end or indeed resetting or restarting the computer, it will always mean **any data not saved will probably be lost**. It is important to explain this to the client.

It is even more important to explain before any incident occurs that **data should be saved at regular and frequent intervals** just in case something goes wrong!

The monitor appears blank

- Check to see if the computer has **gone to sleep** by pressing the space bar on the keyboard.
- Check that the monitor is **switched on and connected** to the mains, i.e.: is the power light illuminated?
- Check that the monitor is correctly **connected to the computer**.
- Check to see if the system works after the computer is **reset** or switched off at the mains and on again.

The computer hangs

Sometimes, after using the computer for some time, it **hangs**, and neither keyboard nor mouse appears to operate. If this happens you can try the following

- Wait a while to see if the computer is performing some **intensive task** and recovers.
- Try **Ctrl-Alt-Del**. If you are lucky it will bring up a **Task Manager** window which will show you which application is not responding and allow you to close down only that application.
- Use the **reset button** to restart the computer.
- **Switch the computer off** at the mains and then on again.

A client has difficulty reading off the monitor because the print is too small

- If this is confined to a **particular application**, it is usually possible to adjust the **zoom setting**. If this does not appear in a box near the top of the window, it will be found in the menu system under *View: Zoom* or *View: Text size*.
- If this applies to **everything on the monitor**, then, if you have access rights, you can change the **monitor settings**. Right click with the mouse on the desktop, choose *Properties* from the resulting menu, choose the *Settings* tab from the dialogue box, reduce the *Screen resolution* setting and *OK*. Unfortunately, the lower the screen resolution, the less can be displayed on the monitor. This often results in an uneasy compromise for people with problems with their sight.

Nothing comes out of the printer

- Check that the printer is **switched on and connected to the mains**, i.e.: is the power light illuminated?
- Check that the printer is correctly **connected to the computer**.
- Check that the printer has **paper** in it.
- Check the **ink supply**.
- Try printing a **test page**.
- Check the print settings in both the **operating system** and the **application** to see that the computer is looking for the correct printer and that the correct size of paper has been selected and that manual/auto (as appropriate) is chosen.

Print layout is incorrect

Sometimes the printer does not seem to use the whole of the sheet of paper or the layout is not the same as on the monitor.

- When using a word processor like Word, it is possible to set the paper size in the **application**. However there is also a setting for the printer itself. If these two settings are different, then the output will not appear correctly on the page. The driver for a newly connected **printer** may default to US legal for the paper size. It is normal to use A4 in this country and applications will use this as default. Go to the printer properties and check the paper size. *Start: Settings: Printers*: right click on the printer concerned, choose *Properties* and select the *Device settings* tab.

The disk appears to be full

Sometimes, when saving data from an Office application like Word, a message comes up that the disk is full.

- It may be that the client's **floppy disk or pen drive is full**. This is quite likely for any sizable word-processed document especially if it contains graphics or other embedded items.

- A fault condition can arise concerning interaction between the application and the operating system which results in a **false reporting** of the disk full error. This is irretrievable and requires the computer to be rebooted. If the client will lose a fair amount of unsaved data, it is worth opening a new document and copy and pasting from the original to the new document and then trying to save that. You may be lucky!
- A similar problem can occur regarding the computer **running out of memory**. Again only rebooting the computer will correct the situation.

The printer jams

- There is no universal solution for this problem as each printer has its own unique mechanism. The best you can do is to familiarise yourself with the various types of printer in your library and how to un-jam each.

10.3.4 Referring clients to sources of support external to library

Where no suitable in-house packages are available, you will need to refer the client to **external sources**. These are likely to be hands on, practical courses from local providers. The knowledge of local provision outlined under Outcome 2 will enable you to suggest appropriate referral agencies.

ACTIVITY 3.4

Before proceeding, make a list of the types of packages which are not available from your library service and would need to be sourced from outside.

External sources of support

As in Outcome 2 you will find ICT skills packages in the locality from:

- Schools
- Colleges
- Universities
- Private trainers
- Local learning partnerships
- Community learning
- Voluntary organisations, e.g.: **Workers' Educational Association**

ACTIVITY 3.5

Here is an exercise to increase your familiarity with sources of ICT skills materials outside the library service.

Choose four of the types of provider given in the preceding list. For each, find the organisation's website. Locate at each two different ICT skills packages being offered. Note any differences between the packages at the different organisations.

You should repeat this exercise for ICT learning packages available over the Internet from providers outside your own locality.

11 Using ICT in Professional Practice

This page is designed for the use of students undertaking the **Level 7 PDA** (Diploma ICTL¹) or the **Level 8 PDA** (Advanced Diploma ICTL²) in **Applications of ICT in Libraries**.

These qualifications were developed by the **Scottish Library and Information Council (SLIC)**³ and are validated by the **Scottish Qualifications Authority (SQA)**⁴

Using ICT in Professional Practice is a core unit in both the Diploma and Advanced Diploma programmes.

Information regarding the **background to the courses**, **content** and **certification opportunities** can be obtained by following the **Level 7** (Diploma ICTL⁵) or the **Level 8** (Advanced Diploma ICTL⁶) links.

You will have received **on-site training** allowing you to develop specific operational knowledge of your library management system. This might have been provided by the **supplier**, the **systems manager** or other library staff.

In some cases your job role may not allow you to get practice in all of the operations we describe in this Outcome. If this is the case, you must at least understand what is going on and see **demonstrations** of the operation. As an example, relatively few staff may actively add new items to the catalogue but it will help your understanding of the operation of the system as a whole if you can observe new items being added.

You should know where to find information or instructions on **procedures** relating to the use of the library management system. If necessary you can create some “crib guides”.

ACTIVITY 1.1

You should have a good knowledge and understanding of the system and its workflows. As an exercise, taking a typical item, such as a work of fiction, draw up a flow chart which lists what happens at each stage from stock selection, through the ordering and acquisitions process, to the point when the item is made publicly available and is visible on the catalogue.

1 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

2 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

3 <http://www.slainte.org.uk>

4 <http://www.sqa.org.uk>

5 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

6 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

Borrower information

The two main elements in an automated system are the **borrowers** and the **stock items**. The basic information held on the borrower, apart from name, is address and contact details. There are usually several classes of borrower.



ACTIVITY 1.2

Before proceeding, jot down the different classes of borrower you are aware of, and what the key differences are between them as far as the automated system is concerned.

Types of borrower

The **main categories of borrower**, common to most public libraries, are:

- adult
- teen
- junior
- concession (e.g.: senior citizen, person in receipt of benefits)
- disability (e.g.: visually or hearing impaired)
- housebound
- temporary (e.g.: transient worker)

You may have noted others.

The key differences are likely to be:

- limits on the **type of items allowed**, e.g.: junior borrowers may not borrow adult stock without a parent's permission
- different **loan periods** for different categories of borrower, e.g.: no limit on length of loan period for borrowers with disabilities
- the **scale of fines** may vary with the different classes of borrower, e.g.: no fines for concessionary borrowers.

Registering and removing borrowers

The precise details of **registering and removing borrowers** can vary significantly depending on the system in use at your location.



ACTIVITY 1.3

Note down the steps you need to go through to:

- register a borrower with the system.
- remove a borrower from the system.

In addition to the borrower details which are permanently on the system, it may be necessary from time to time to add a **temporary message** to alert members of staff to something connected with a particular borrower. Some of these messages may be added automatically by the system. Typical would be information about money owed by or due to the borrower.

Staff will also be able to add specific messages.

Before proceeding, jot down some examples of messages which you might wish to add about borrowers.

Messages about borrowers

You might want to ask for some of the **borrower data** to be verified, e.g.: if you have tried unsuccessfully to contact the borrower by telephone, you could add a note asking for the telephone number to be checked. Other data which sometimes changes (and borrowers neglect to inform the library) are home address and e-mail address.

Messages could be of a more **personal** nature “Mrs Jones left her umbrella in the library on her last visit. It is in the lost property cupboard.” Or “Tell Mr O’Neill that we have got some good new stock in about the Atkins diet.” With these sorts of messages, do be careful to keep them factual. Data protection legislation means that borrowers are entitled to read any information stored in a computer about themselves.

Remember to **delete** these messages once they are no longer applicable. Mr O’Neill will be pleased to be told once about the Atkins diet books but he will not appreciate being reminded of them on every visit to the library!

11.0.5 The circulation module

Issuing and discharging items of library stock using an automated system is usually quick and straightforward. Sometimes the system will indicate a complexity in the transaction, e.g.: you are prevented from issuing an item to a borrower. Although in almost all cases the system will supply you with correct information regarding the status of the borrower and their borrowing activities, the underlying reasons may not be displayed on the screen.

However, you have to be able to explain the actions of the system to the borrower. This requires both an excellent understanding of the library authority rules (which guide the system) and the ability to access quickly the required screens of the system to find the reasons for the system’s decisions.

You should have a good **understanding** and have had **practice** in the main operations of the circulation module of the system.

Issuing items

This is the basic action of entering the issuing details, i.e.: borrower and item barcodes on to the system.



Before proceeding, jot down problems that may occur with this task.

Problems with issuing

We can think of several problems, such as:

- With **self-issuing systems**, where the borrower is able to carry out self-issue over the Internet, borrowers, especially if they are inexperienced in doing this, can easily make a mistake.
- The system indicates that the borrower's **lending limit** has been reached.
- The borrower would like at this point to know **which other items** they have out on loan.
- Different classes of items may have different **loan periods**, e.g.: DVDs may need to be returned within three days. Certain types of book may be lent for only one week instead of the general three weeks. The system may prompt you about this but you have to remember use the correct date stamp on the item.

You must be able to deal with these situations and be aware of relevant **library policies** so that you can communicate quickly with the borrower and explain the reason for any problems.

Discharging items

Most automated systems allow items to be discharged by entering only the **item barcode**. They do not require borrower information to be entered. This makes discharging items a simple and fast operation. However, **additional steps** are sometimes required.



Before proceeding, jot down problems that may occur when discharging items.

Problems with discharging items

We can think of several potential problems, such as:

- The returned item is **damaged**. This must be shown on the system and the book sent for repair or disposal.

- The returned item is subject to a **request by another borrower** or an inter-library loan. The system will prompt on this and you must follow reservation or ILL procedures.

Other circulation tasks

- **Renewing items:** this is a variation on the issuing procedure. However, it may be a renewal over the telephone. This requires you to manually input the details into the system.
- **Reserving Items:** make sure that you are familiar with the steps you must carry out on the system to input a reservation.
- **Overdues:** most automated systems generate overdue notices automatically and the screen will show any fine incurred by the borrower at the point of return of the item.
- **Charges and Fines:** reservations often require charges to be made to the borrower. Charges may also be made for interlibrary loans. The other common financial transaction is related to fines for late return of items.

ACTIVITY 1.4

Make a list of the charges your library make to borrowers which must be administered via the library's automated system.

Data provided by the circulation control module of the automated management system can make a significant contribution to the successful management of stock. Used properly, the system can provide data on usage for managers to support their decisions in areas such as stock selection policy, opening hours, staffing levels, distribution of stock and information for statutory and local performance indicators. A particular use of the library management system is in monitoring the performance (levels of issuing of resources) of existing stock.

11.0.6 The acquisitions module

Once new stock to be purchased for the library has been selected (the selection process is covered in outcome two of this unit) the automated system plays a prominent part. Although details will differ, there are three clear steps - **ordering, receipting and invoicing**. The system then will allow the acquisitions process to run, using its Reporting Systems and Order Transmission.



ACTIVITY 1.5

Find out the procedures for placing and receiving stock orders on your automated library system and how this interfaces with the system's monetary reporting facility.

The above are the procedural steps. However, the automated system is equally powerful in aiding the acquisition process when it comes to **financial control**.

The acquisition of new items for your library stock is governed principally by an **acquisitions policy**. Different library authorities will have different methods but the following is the basis of the process:

- The **total level of resources** available for the library service as a whole is set.
- **Priorities** for spending are agreed.
- The total budget is then broken down across the various **budget headings**, e.g.: fiction, non-fiction, DVDs, allocations to different branches etc.
- Budget holders are informed of their **budget allocation** and acquisitions may proceed.

It is important that you clearly understand the **boundaries** of your personal authority within the ordering of any stock selection process. You may be permitted to place orders or this may only be done by a more senior member of staff. Know what responsibility you have and your accountability for actions within your remit.

Clearly the whole process of acquisitions is based on the **availability of funds** to enable the purchase of new stock items. Thus, there is always a very clearly defined method of deciding how much money can be spent on the various types of new stock item.

The joy of an automated system is that it can give really hard data to inform the acquisition process. It will give the **spending situation** under the various budget headings. This includes both the projected and the actual spending to date. Although you may not need to access this management information, it is important for you to realise that you have a vital part in this. You must always enter order information accurately to ensure the system has the correct data for its calculations.

Of course there is also **non-financial information** in the data. For instance, it can also give information on the performance of the various suppliers used by the library. This allows the library managers to select the best performing suppliers for future orders.

11.0.7 The cataloguing and stock management modules

A library catalogue has two main functions:

1. it is a **record** of the items which comprise the library stock
2. it allows people to **seek out** suitable items they wish to use

The first appearance of automated systems in libraries related to automation of the library catalogue. In the late 1960s computers became powerful and available enough to allow libraries, particularly **academic libraries**, to embark on ‘computerising’ their catalogues. It is easy to see why this was more attractive than going for the circulation system first. Users could use searching techniques to find book titles by keywords. Networks were beginning to appear so that it became possible to search for titles in **other libraries** remotely. You must compare this with the position up till this point of using paper or card indexes to find a book only by its author or subject.

From the user’s point of view the cataloguing module of the automated library system is the most powerful and useful part of it. Of course the user has to learn how to use it to advantage, as indeed do those who work in the library.

The advantages of automated catalogues

The advantages of automated catalogues are twofold:

1. They permit sophisticated **searching** of the library stock.
2. They link to the circulation control system so that not only can a borrower ascertain that the library service holds a particular item, they can also see its **loan status** at the time.

The search facility of the catalogue module is very flexible. It will allow searching for items on author, title, accession number as well as classification. However its greatest power for users is to search on **subject keyword** or **word in title**. You will no doubt have to demonstrate this feature to keen users of your library.

In your administrative work related to the catalogue, i.e.: stock management, you are most likely to be locating items whose details are known. You will be searching on author, title or accession number. Having found the item, you may need to withdraw it, thus deleting its entry in the catalogue.

ACTIVITY 1.6

Note down the procedure to withdraw an item from the catalogue module of the automated library system.

Withdrawing items

Although the **basic deletion process** is very simple, there may be complications. The system may require a special procedure if it is the last remaining copy of a book, or if it is an item forming part of a special collection. Clearly your library will have its unique rules for this type of matter.



ACTIVITY 1.7

Ascertain the policy in your library if an item being withdrawn is shown to be the last copy of this title held within the library service.

Adding items

You also need to understand how resources are added to the catalogue. In some library services, library staff undertake much of the work related to cataloguing and classifying items to be added to stock. In many other services this is done **automatically** using records from the supplier or downloaded from elsewhere during the order process. However,

even here, with certain items, such as donations to the library, it may be necessary to create a new record and enter all its data manually.



ACTIVITY 1.8

Note down the procedure to manually add an item to the catalogue module of the automated library system.

Of course, having found the item after successfully searching the catalogue depends on knowing the layout and organisation of the particular library. The catalogue entry will include a shelf mark.

Before proceeding, note down how fiction items are arranged in your library.

Shelving items

Fiction is usually arranged by author surname in alphabetical order. Then, within any one author, by title. Where no author exists, the editor's surname or title is used alphabetically.

A popular method of shelving fiction is by the use of **genres**. Essentially a set of genres are decided upon, e.g.: crime, fantasy, science fiction, romance and the books are labelled correspondingly and placed on the shelves in their appropriate genre. The catalogue entry will indicate this.

Non-fiction is usually shelved by **subject** according to the local classification system. Here too genres may be used, e.g.: libraries frequently group all biographies together.

Whichever methods are used, stock items are always organised according to agreed principles by libraries in order to aid the swift retrieval of resources either physically from the shelved collection or virtually from the library catalogue.

11.0.8 Inter Library Loan module

You should be familiar with the steps associated with the ILL process.

It may be that the borrower has a specific item in mind, in which case you must get a precise description of the item.

What information about a book would you ideally wish to have before placing an ILL request?

To satisfy the British Library ILL form, a considerable amount of information is required, indeed the full bibliographic details. In the case of a book, these are the following:

- Author

- Title
- Year of publication
- Edition
- ISBN
- Publisher & place of publication
- The source of the reference

And remember you also need to record the name and contact details of the borrower.

If, as is likely, the borrower cannot supply you with full bibliographic details of the item being requested, you will need to ascertain these using appropriate bibliographic tools.

It may be that from the nature of the borrower request (they cannot find an item to satisfy their quest) you may need to follow the reference interview process, described in Unit 1 so that you have a clear definition of the subject area required by the borrower.

Inter Library Loan procedures

Before embarking on the ILL procedure, it is always worth **double-checking** your own library catalogue to verify that the requested item is not actually in your stock. If it is not, your library service will have **procurement procedures** and appropriate ways of securing the item. For example, this might be purchasing the item, instigating an internal ILL or carrying out an external ILL.



ACTIVITY 1.9

Check out your library authority's procurement procedures for securing an item which might be subject to an ILL.

Let us assume that an ILL will be required. The automated library system will allow the following steps to be carried out:

- The initiation of an ILL request
- Tracking the progress of an ILL request
- Informing the borrower of the arrival of an inter-loaned item
- Issuing the inter-loaned item
- Discharging the inter-loaned item
- Recalling an inter-loaned item
- Recording the return of an inter-loaned item to its home library

Using Inter Library Loans

You should be familiar with all aspects of the Inter Library Loan system in use at your own location.

ACTIVITY 1.10

Make yourself familiar with the Inter Library Loan module of your automated library management system for:

- Initiating an ILL request
- Monitoring progress of an ILL request
- Carrying out internal ILL procedures for issue, discharge, recall of ILL items to client
- Carrying out procedures for receipt of and return of ILL item from/to home library.

You will find that the rules governing the use of ILL items will vary from those for stock items found in your own library. It is important to be aware of these conditions and to be able to explain them to the borrower.

Before proceeding, jot down some points which you think might be different for ILL items.

Rules governing Inter Library Loans

Three important points are as follows:

Costs: your library may make a charge, thus passing on some of the ILL cost to the borrower, e.g.: fines for late return - there are additional penalties for non-return of British Library items within loan period.

Timescales: you will need to give as accurate as possible an estimate of the time taken to secure the item. Also the period of time that the borrower can hold the item may be different from the loan period for similar items in your own library stock.

Restrictions on use : it may be that the item may only be consulted within your library and not borrowed. There may be photocopying restrictions on the item.

11.1 Use ICT sources in stock selection

11.1.1 Criteria for stock selection

Although you may not be responsible for the **selection** and **acquisition** of materials for your library, you may contribute to the identification of appropriate materials for the service. You certainly need to understand the **principles** of stock selection for public libraries.

Before proceeding, jot down the information you think you would need to make decisions on which stock to purchase.

Selecting stock

The two main drivers in stock selection are the **current demands of the borrowers** and the **current stock available**.

The current demand has to be **audited**. This is relatively simple when an automated library system is being used. In fact, it is possible to be overwhelmed by the available statistics from an automated system. So a careful approach is required in deciding which categories, fiction genres and authors to run statistics on.

This information on borrowing can be compared with the current stock provision. Broadly speaking there should be a match between the two. Thus looking at the detective genre, if the books by two popular authors show a great disparity such that the books by author X are on loan five times as much as author Y, there may be a good case for purchasing more copies of the books by author X.

Before proceeding, think of circumstances where this may not be valid

Factors affecting demand

It would be important to take into account any **reading promotions** carried out by the library on author X. Another factor might be that author Y's books are shelved in an inaccessible place. Perhaps X's books are paperback and Y's are hardback and your borrowers prefer the paperback format.

The conclusions on the previous page are made under the assumption that the **stock levels, display methods and format** are roughly the same for both authors

You also need to be aware of reading promotions external to your library which might drive a boom in borrowing books by author X. Although it may still be valid to increase your stock because there is a genuine and sustainable increase in interest in reading author X as a result of rave reviews on a television arts programme, you do need to question the **sustainability**. You do not want to be left six months later with a shelf full of author X's books which are no longer being borrowed.



Before proceeding, think of other reasons for choosing items for stock apart from balancing stock and demand.

Additional criteria for stock selection

Apart from this **balancing of stock and demand**, we think that the following points will drive stock choice.

Gaps in stock which need to be filled. Obvious examples are new novels by favourite authors, or earlier novels which have never been in the stock of the library. There will also be a need for **replacement copies** due to poor condition or because material is out of date in the case of reference items for instance.

There will also be some form of **stock development plan** for your library. This may cover the need for more diverse formats, including non-book resources, as well as new directions of book materials.

ACTIVITY 2.1 Note down the stock development plans for your library. If necessary ask other library colleagues.

All the above points go to making up the **stock selection policy** for your library. From this policy, it is possible to identify criteria for selection of new stock items.

It is now possible to use **online selection tools** to find possible new items and assess them against the agreed stock selection criteria.

11.1.2 Online library catalogues

Of the possible ways of finding suitable material for stock selection, the use of online library catalogues of other libraries has the advantage that the materials ought to be properly catalogued and so easy to find using keywords.

QUESTION TextEntry1: Online library catalogues

This ability to search other library's catalogues is increasingly possible because it is becoming commonplace for libraries to have catalogues which can be searched via the Internet. The **UK Public Libraries Page** is a useful resource, linking to the web-available catalogues.

<http://dspace.dial.pipex.com/town/square/ac940/weblibs.html>

Some services **combine** together the catalogues of several libraries. A single-search interface is used to cross-search multiple catalogues in a single search action. In Wales there is CatCymru⁷ which enables the searching of library catalogues across all public, FE and HE libraries in Wales



ACTIVITY 2.2 Go to the UK Public Libraries Page and find examples of public library services with combined catalogues. (There are several examples of this.)

⁷ <http://library.wales.org/catcymru/>

Combined catalogues

Some websites combine catalogues of collections with a common theme. Here are some more examples of catalogues to explore:

- **British Library** <http://catalogue.bl.uk>
- **Northern Ireland** <http://www.ni-libraries.net/library-card/library-catalogue/>
- **CatCymru** <http://library.wales.org/catcymru/>
- **Birmingham** <http://www.birmingham.gov.uk/libcat>

Differences between catalogues

The catalogues we looked at on the previous page vary in the details they provide and in the range of functions which can be performed. They do however offer the opportunity to trace resources. Here you are using the existing systems for inter-library loan as a helpful way of allowing library staff to view each other's collections.

Some services may have automatic links to bibliographic service providers such as **Talis** or subscriptions to services such as **Whittaker's Books in Print**.



ACTIVITY 2.3 Go to the Northern Ireland catalogue <https://opac.librariesni.org.uk/> and search under author for Dan Brown's "The Da Vinci Code". Look through the list and select the correct author. Follow the links and note that you can clearly see format, availability and reserve the item online. Compare this to the information available for the same book from your service.

QUESTION TextEntry1:

11.1.3 Publishers' and booksellers' websites

The most obvious place on the Internet to look for new stock items is of course the library booksellers' and publishers' websites. These companies aim to sell the items and so one would expect that they contain the most **up to date information** on things like prices and publication dates for the items.

Before proceeding, think of other more negative points about the use of such websites.

Negative aspects to commercial sites

Well, you have to bear in mind that publishers and booksellers have a **commercial imperative** and thus the content may be biased or might not provide full information.

You must exercise **caution** when using these websites to select material and you must therefore ensure that any selected materials do properly match the agreed selection criteria.

Example sites

Here is a small selection of useful sites:

- Askews http://www.askews.co.uk/site/default_askews.asp
- Bertram Library services <http://libraryservices.bertrams.com/BertramLibraryServices/>
- Booksellers Association <http://www.booksellers.org.uk/>
- Scottish Bibliographies Online <http://www.scotlandsulture.org/sbo/sbo.htm>
- Welsh Books Council <http://www.clcc.org.uk/>
- Books from Scotland <http://www.booksfromscotland.com>

ACTIVITY 2.4

Go to the Harper Collins website (<http://www.harpercollins.com>) and follow links from the home page to New Releases, Forthcoming Titles and Best Sellers. Look for a favourite author in these sections and note the information you can find about the author, forthcoming events, full list of titles in print, range of formats titles are available in and links to author's websites. NB: You can also register for an author tracker facility and to find out about new writing.

Services offered

Some of the websites offer a range of sophisticated services – pre-publication ordering facilities, EDI (Electronic Data Interchange) information, download facilities of MARC (Machine Reading Catalogue) records and tracking systems for current orders.

ACTIVITY 2.4

Choose one of your own library suppliers, view their website and make a note of the services apart from straight forward sale of items which they provide. Find out how well they integrate with your automated library management system. You may find it useful to ask your colleagues about this.

11.1.4 Online reviews and personal evaluations

The Internet provides a great potential for reviewing potential new stock items. There are many websites which will provide this sort of service. An obvious choice is the bookseller Amazon

However there are many others' including sites linked to newspapers. Here are some examples:

- The Guardian book review site <http://books.guardian.co.uk/reviews/>
- The Independent book review site <http://www.independent.co.uk/arts-entertainment/books/reviews/>

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Before proceeding, think of more negative points about the use of such websites.

Negative aspects of online reviews

You have to treat reviews which have been posted on the Internet with some caution. They often include only part of the entire review and the views of the individual reviewer are unlikely to have been through a **rigorous editorial process**, unlike print journals.

It is also possible to review extracts of audio/visual materials using the Internet, again candidates should return to the stock selection policy for guidance prior to purchase.

ACTIVITY 2.4

Go to the Guardian's website <http://books.guardian.co.uk/reviews/> and compare one of the reviews with the book blurb on the publisher's website or another review on the same title. Look at style, content, detail and overall conclusion of the reviews with a view to their helpfulness within stock selection.

11.2 Use ICT in continuing library practice and professional development

11.2.1 Discussion lists

Online discussion lists (sometimes called groups, newsgroups or forums) are the Internet version of electronic **bulletin boards**, popular among computer users long before Internet. A user can post comments on a topic and other users can respond. Messages are visible to all members of the group and some services provide extensions such as file storage and calendaring. The original newsgroup service, **Usenet**, is now available via Google Groups (<http://groups.google.co.uk>). Other services include **Jiglu** (<http://www.jiglu.com/>) and **Yahoo Groups** (<http://groups.yahoo.com>).

Discussion lists are a useful tool for both individual professional development and solving specific problems. Lists work in the following way. You have to sign up as a member, giving your e-mail address. Any of the members can send in an e-mail with information of interest to the group or a question. All these e-mails are forwarded automatically to all list members. This usually generates a flurry of helpful responses.

Some lists are **moderated** so that the e-mails are only posted after they have been vetted. For the lists you use, you should be aware which are vetted and which allow e-mails to be sent instantaneously.

We can classify discussion lists into three broad categories:

- professional discussion lists run by or for the professional library bodies
- government or local government sponsored lists
- ad hoc lists run by interested people or groups.

Professional discussion lists

JISC mail (the service provided by the Joint Information Systems Committee) is one of the key providers of discussion lists and has a number of **public library**, **special interest** and **library profession groups**. The home page is <http://www.jiscmail.ac.uk/>. You can search for different lists based on topic and there are many related to libraries.

You can see a list of library categories on this page:

<http://www.jiscmail.ac.uk/mailinglists/category/Library.html>

Three specific examples of lists which can be used for professional matters by library staff are:

- **LIS-PUB-LIBS:** is a forum for discussion of issues relating to UK public libraries. See the joining page at: <http://www.jiscmail.ac.uk/cgi-bin/webadmin?AO=lis-pub-libs>
- **LIS-SCOTLAND:** is a forum for discussion of issues relating to Scotland. See the joining page at: <http://www.jiscmail.ac.uk/cgi-bin/webadmin?SUBED1=lis-scotland&A=1>
- **LIS-Wales:** is a forum for discussion of issues relating to Wales. See the joining page at: <https://www.jiscmail.ac.uk/cgi-bin/webadmin?AO=lis-wales>

CILIP has a range of professional discussion lists which are targeted at supporting members of library staff who share particular professional interests or working environments. Visit <http://www.jiscmail.ac.uk/mailinglists/category/Library.html> to browse the library discussion lists (you can search for the CILIP sponsored discussion lists using 'LIS-CILIP').

ACTIVITY 3.1 Select an appropriate online discussion group on a subject that interests you e.g. information literacy, youth library work or mentoring. Join a group (you will find more at <http://www.jiscmail.ac.uk/mailinglists>) and read some of the recent discussions.

Government sponsored lists

Non-library-specific discussion groups, such as those run on local authority websites or the websites of other agencies may also be useful. An example is the **Welsh Assembly Government** which offers a range of consultation and discussion forums (you have to register to access the forums):

<http://wales.gov.uk/?lang=en>

ACTIVITY 3.2

Search the Internet for a discussion list for your geographic area, perhaps run by your local authority.

Ad hoc groups and lists

There is a range of commercial service providers such as:

- **Yahoo Groups** <http://uk.groups.yahoo.com/>
- **Jiglu** <http://www.jiglu.com/>
- **Freeboards** <http://www.freeboards.net/main.htm>

They provide discussion groups (lists) free of charge. These offer simple, alternative ways to start discussion lists for groups, e.g. Community Services Group (Scotland) at: <http://groups.yahoo.com/group/csgscotland/> Of course this also means that you can also easily set up a group to discuss any topic you choose. This approach can allow you to share ideas in the professional field.

Social networking websites have a huge potential for useful exchanges of news, information and ideas. Many of them have established areas for library interests. The main problems are the quality of the content and access from within local authority firewalls. Here are some sites to look at, if you can access them.

- **CILIPS** <https://twitter.com/CILIPScotland>
- **CILIP South East Branch Flickr** <http://www.flickr.com/photos/cilip-se/>
- **CILIP Career Development Group Facebook** <http://www.facebook.com/group.php?gid=2421438148>
- **Welsh libraries blog** <http://libalyson.wordpress.com/>
- **Del-i-cious**
- **Scottish libraries blog** <http://scottishlibraries.wordpress.com/>
- **Scottish Library and Information Council** <http://www.scottishlibraries.org/> which incorporates a range of web 2.0 tools. Guidance on using web 2.0 in a library and information service context have been published and are interesting reading.

ACTIVITY 3.3

Taking any one of the three group providers mentioned above, explore how to set up a group for your own use. For all three use the group index or search system to find groups related to library work.

11.2.2 Professional websites

You should be familiar with and able to access a range of key professional websites to support you in your professional practice.

Before proceeding, jot down any websites you can think of which fall into the above category.

Types of professional website

The websites you have listed are likely to fall into one of three categories:

- Websites of the **strategic agencies**
- Websites of **professional associations** and **special interest groups**
- Websites of **local agencies**

Websites of the strategic agencies

Each of the 4 UK home nations has its own strategic agency for libraries. These are:

- Arts Council England <http://www.artscouncil.org.uk/what-we-do/supporting-libraries/>
- Scottish Library and Information Council (SLIC) <http://www.scottishlibraries.org/>
- Museums Archives and Libraries Wales (CyMAL) <http://www.cymal.wales.gov.uk/>
- Library and Information Services Council (Northern Ireland) LISC(NI) <http://www.liscni.co.uk/>

ACTIVITY 3.4 Look at each of these 4 websites and compare the information given.

Websites of professional associations and special interest groups

All **professional associations** have websites. These usually comprise pages which can be accessed by anyone plus further sections which are **available only to members** who use a password to access them. The main professional association in the library field is the **Chartered Institute of Library and Information Professionals (CILIP)** at: <http://www.cilip.org.uk/>

Many relevant special interest groups have websites. These can be particularly useful as they often act as portal sites, collecting links to other websites based on the same or similar topics. Examples are:

- **CILIP Multimedia Information and Technology Group** <http://mmitblog.wordpress.com/>
- **The Historic Libraries Forum** <http://www.historiclibrariesforum.org.uk/>
- **International Association of Music Libraries, Archives and Documentation Centres** <http://www.iaml-uk-irl.org/>

Websites of local agencies

You should also be aware of the importance of the contents and functions of your own **local authority website** and **local intranet**.

Simple client enquiries made at the library counter or over the telephone can often be answered from these sources and it is useful to be well informed regarding content and layout so that site navigation takes the minimum amount of time.

ACTIVITY 3.5

Spend some time making yourself familiar with the website run by your own local authority.

11.2.3 Online professional journals

Online journals offer a readily accessible and searchable source of professional information. Some are freely available but others operate on a subscription basis. Examples are:

- **CILIP Update** <http://www.cilip.org.uk/publications/updatemagazine>
- **CILIP in Scotland** <http://www.cilips.org.uk/>
- **Journal of Information Literacy** <http://ojs.lboro.ac.uk/ojs/index.php/JIL>

CILIP members enjoy free online access to the **Journal of Information Science** and **Journal of Librarianship and Information Science** from the CILIP website.



ACTIVITY 3.6

Look at the latest issue of CILIP Update at <http://www.cilip.org.uk/publications/updatemagazine> Familiarise yourself with the layout and content. Is there anything in this issue which is of interest to you in your current job role?

You should get into the habit of regularly checking on-line journals to gather information and ideas which are relevant to your own continuing professional development.

12 Safe and Legal Use of ICT

This page is designed for the use of students undertaking the **Diploma** (Diploma ICTL¹) or the **Advanced Diploma** (Advanced Diploma ICTL²) in **Applications of ICT in Libraries**.

CHANGES TO THE QUALIFICATION The Diploma and Advanced Diploma have been superceded by the Professional Development Award in Applications of ICT in Libraries at levels 7 and 8 (English and Welsh levels 4 and 5). They consist of much the same content as the Diploma and Advanced Diploma but the PDAs include two new Digital Culture units.

These qualifications were developed by the **Scottish Library and Information Council (SLIC)**³ and are validated by the **Scottish Qualifications Authority (SQA)**⁴

Supporting Clients in the Safe and Legal Use of ICT is a Mandatory unit in the level 7 programmes.

Information regarding the **background to the courses**, **content** and **certification opportunities** can be obtained by following the **Diploma** (Diploma ICTL⁵) or the **Advanced Diploma** (Advanced Diploma ICTL⁶) links.

12.1 Safe practice relating to the use of ICT for communication

12.1.1 Using ICT for communication

This section relates to supporting clients in **using ICT safely** for communication purposes, within the constraints of current legislation. Clients should already possess basic ICT skills, such as simple word processing and the ability to navigate the Internet using a web browser. You should also establish the client's communication needs, e.g. do they need e-mail for personal or work-related correspondence, in order to assist in the selection of a suitable e-mail service.

The use of e-mail exploded some years ago, encouraged by the fall in prices of home PCs and the introduction of free Internet access in libraries and schools. Since then despite the

1 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

2 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

3 <http://www.slainte.org.uk>

4 <http://www.sqa.org.uk>

5 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

6 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

rise of social media email use has continued to increase and is predicted to continue. Email is an essential method of communication both socially, commercially and professionally.

There are many advantages:

- the speed of delivery
- the ability to send to multiple recipients
- the flexibility of using web-based e-mail accounts for sending e-mails for various locations
- the ability to attach other types of files, such as images.
- the low cost involved in sending mail in bulk.

Electronic mail

You should have an in-depth knowledge of electronic mail including:

- local e-mail software, systems and protocols
- the structure of e-mail addresses
- tracking e-mail messages - delivered, read etc.
- using importance flags
- changing setting for preferred presentation

You may be asked to set up e-mail accounts for clients ...

Setting up e-mail accounts

A web-based e-mail account is one where the user accesses his or her e-mail by means of a **web-browser** , such as **Internet Explorer** or **Firefox** , rather than by using a specialist e-mail client program, such as **Outlook**, **Outlook Express** or **Thunderbird** .

You should be able to **set up web based e-mail accounts** and to show clients how to do this. This includes opening and closing the account.

Free e-mail services

Popular free e-mail services include the following:

- **Gmail** <http://www.gmail.com>
- **Hotmail** <http://www.hotmail.co.uk>
- **Lycos** <http://mail.lycos.com/lycos/Index.lycos>
- **Yahoo** <http://mail.yahoo.com/>
- **Mail2web** <http://mail2web.com/>

For some tips on email providers and the pros and cons associated with each one have a look at this link

<http://www.pcadvisor.co.uk/features/internet/3448241/whats-best-free-email-service/>

ACTIVITY 1.1

If you are not already familiar with the process, log on to one of the e-mail services above and follow the instructions to create an account for yourself, e.g.: joe_bloggs@hotmail.co.uk. As you do this, note down any points which you would wish to make to clients when demonstrating how to set up an email account.

You will use this account or one of your own existing ones in subsequent activities.

Sending and receiving e-mails

Using e-mail is a big step for the uninitiated and assumptions should not be made about how quickly clients can absorb technical details and instructions.

If you are in any doubt, you can find out how to send and receive mail from the help pages of the relevant e-mail services. You'll usually find a link to this on the opening page of any web based e-mail service.



ACTIVITY 1.2

Select one of the web-based e-mail services listed above and show a client how to carry out the following tasks:

1. create a new e-mail
2. add content to an e-mail
3. send an e-mail to a recipient
4. check for new e-mails sent to them
5. open received e-mails
6. reply to e-mails received
7. forward a received e-mail to another recipient.

If you send e-mails to one of the accounts you created earlier, you'll be able to check that they've been received correctly and demonstrate this to the client.

Once your clients have mastered the basics of e-mail, they'll probably want to move on to more complex tasks. Let's start by looking at sending, receiving and saving attached files ...

Using attached files

One of the particularly useful things about e-mail is the ability to **attach files** and thus send, say, copies of photographs to the recipient. This is particularly useful for older clients staying in touch with their family when they stay at a distance. Any sort of file can be

attached and sent with an e-mail. Another common file type attached to e-mails is a word processed document

You should be able to show clients **how to attach files**. The client may create the file in the library, e.g.: by typing a Word document or scanning in a photograph. Clients may also wish to attach previously created files brought to the library on floppy disks, CDs or USB flash drives. Not all library authorities allow the use of removable data, so you should check this for your own library service.

One area where clients may run into difficulties involves the size of attached files

Size of attached files

You should make the clients aware of **possible limits to the size** of files attached to e-mails. There are two points. Firstly some web-based free e-mail services do not allow particularly large attachments. The second point is that, if the recipient is on a dial-up connection, large attachments may be almost impossible to download. This is a particular problem with photographs which can often be several megabytes in size.

You should explain the idea of possibly **resizing** photographs and definitely compressing them. A rough guide might be that unless there is a special reason, attached photographs should be no more than say 100K in size.

To resize a photograph, the client needs access to image processing software. A free example may be found in Irfan View⁷ On the other hand many e-mail programs offer automatic compression of photographs.



ACTIVITY 1.3

Using one of the e-mail programs listed above, demonstrate to a client how to send both a word-processed document and a photograph as attached files. If you send e-mails to one of the accounts you created earlier, you'll be able to check that they've been received correctly and demonstrate this to the client.

Using zipped files

With e-mail attachments such as large graphics or word processed documents a reduction in size is achieved by **compressing** or “zipping” the file.

If you are using certain operating systems, for example most versions of Linux and Windows ME/2000, file zipping is built in to the operating system. If you are using an earlier version of your operating system, you may need to install a third-party program such as WinZip. You can download an evaluation copy from <http://www.winzip.com>

⁷ <http://www.irfanview.com>

ACTIVITY 1.4

Using one of the e-mail programs listed above, demonstrate to a client how to compress or “zip” documents and attach them to an e-mail. If you send e-mails to one of the accounts you created earlier, you’ll be able to check that they’ve been received correctly and demonstrate this to the client. You should also show the client how to decompress or “unzip” files and save or print them.

Another area your clients will need to know about is virus checking

Virus checking

Viruses in e-mail attachments may cause serious problems for users. Local authorities have anti-virus software in place but you should be aware that this can be a serious problem for home users. Clients can inadvertently pick up viruses and then transfer them between machines when they use files on public access PCs. Automatic checking should be in place but you should still advise clients not to open unrecognised e-mail messages or attachments.

Anti virus facilities, and the degree to which they can be automated, vary between e-mail service providers. You can find out how to configure anti-virus facilities from the help pages of the relevant e-mail services, which you can access from the opening pages.

It might be worth noting that several providers limit sending or receiving of certain attachments (such as .exe, .bat or .com which are all Windows executables) - this can be useful in preventing the spread of viruses but it might hinder you should you wish to send such files legitimately over the system.

Implementing virus checking

Now try some activities relating to implementing anti-virus software.



ACTIVITY 1.5

Go to the Lycos web-mail site at <http://mail.lycos.com/lycos/Index.lycos> and find out which type of virus protection is implemented.

Alternatively, try searching for any email providers anti virus protection. e.g. type gmail virus protection into Google.

In order to show clients how to check that the virus checking is turned on in their web-based e-mail service, you must be familiar with this facility in the commonly used services.

ACTIVITY 1.6

Log on to any of the new e-mail accounts you created in the first exercise and make sure that automatic virus checking is turned on, as far as permitted by the e-mail service provider.

Anti-virus software

It is also worth informing clients about general antivirus software, which will protect against viruses from any source not just e-mails e.g. files brought in by a client on a floppy disk. AVG is a free anti-virus program which can be downloaded from <http://www.grisoft.com>

Evaluation versions of subscription anti-virus programs can often be found on computer magazine cover CDs or they can be downloaded from:

- **McAfee** <http://download.mcafee.com/us/eval/evaluate2.asp>
- **Norton** <http://www.symantecstore.com>
- **Panda** <http://www.pandasoftware.com/download/>

Once clients start to build up a collection of sent and received e-mails, they may need to learn how to manage them so that they can be located easily when required, so let's have a look at Managing e-mails ...

Managing e-mails

The key to **effective management of e-mails** is always to have an almost empty in-box. In other words, when you receive e-mails you should be able to deal with them promptly and either delete them afterwards or store them in other folders which you have prepared in your e-mail program.

You have to show your clients how to do this with their web-based e-mail account. We suggest that you spend a little time with the client, getting an idea of the likely categories for their e-mails, setting up one folder for them and then allowing the client to do this for themselves for the other categories.

Google mail (Gmail) utilises Labels rather than folders. Labels work in a similar way but can take some getting used to especially as emails can be given more than one label.



Before proceeding, think of a typical client and jot down a list of folder names which might accommodate the majority of their e-mails.

E-mail folders

We can think of the following:

- Family members
- Friends

- On-line shopping
- Holidays

You may also have thought of others.



ACTIVITY 1.7

Using one of your web-based e-mail accounts, set up folders for the four categories we have listed above. Note down any specific points you would want to alert a client to when demonstrating this procedure to them.

As well as trying to prevent viruses, clients will also need to take steps to protect themselves against other online threats and nuisances. Let's take a look at Combating spam ...

Combating Spam

All e-mail accounts are bombarded to a greater or lesser extent by **unsolicited e-mails** sent out by hoaxers or commercial interests. These e-mails are known as "spam". In some cases clients will find the spam e-mail subject as well as the content offensive. Most software systems and web based providers offer processes which can block a large percentage of unsolicited mail. You should make clients aware that accessing some websites and responding to messages where they are required to type in their e-mail address may aggravate the problem by signing them up to more junk mail. This is a particular problem with unsolicited e-mails which have a link purporting to remove you from the mailing list but in fact confirms that the account is active and will result in more spam.

The **spam filtering systems** used by web based e-mail providers suffer from the same flaw that all spam filtering exhibits – sometimes, genuine wanted e-mail gets classified as spam and does not appear in the in-box. You can find out how to manage combat spam from the help pages of the relevant e-mail services. You'll usually find a link to this on the opening page of the service.

A good suggestion is to have two email accounts, one for personal emailing and another for use when purchasing online. Online shopping is a common way for spammers to find email addresses to pester!



ACTIVITY 1.8

Log on to each of the new e-mail accounts you created in the first exercise and make sure that the spam filters are turned on.

E-mail etiquette

The term “netiquette” is used to describe the rules that govern polite use of the Internet when interacting with other users. Clearly, a large part of this centres round the use of e-mails.



Before proceeding, jot down any points you can think of relating to courteous and effective use of e-mail.

Netiquette

Simple points of e-mail netiquette are:

- properly describing the purpose of the e-mail in the subject field
- using spell checking
- avoid using solely capital letters. Using capital letters in an e-mail is seen as the equivalent of shouting at someone.



ACTIVITY 1.9

Look at the exhaustive set of e-mail etiquette rules at <http://www.emailreplies.com> and make a list of the most obvious ones which you can then demonstrate to clients using e-mail in the library.

Clients may also want to send e-mail to news groups, so we'll look briefly at Using news groups

Using news groups

When using news groups there is a protocol in replying to the various discussions/threads:

- make sure that you are using the **correct news group**
- make sure that you really mean to reply to the **whole group** and not just send a personal message to an individual member
- always reply to the **correct thread**
- sending the same message to several groups (**cross posting**) is frowned upon.

Clients should be warned that they should always think **very** carefully before posting a message to a public newsgroup. There are group archives (e.g.: <http://groups.google.com>) which store every message ever posted, so a message can have a potential lifespan of

many years and could be seen by millions of people! Once a message is posted there is no way of retracting it.

Sometimes clients will want to send an e-mail to several people at the same time, so we'll look next at Sending e-mail to multiple recipients...

E-mailing multiple recipients

One of the time-saving features of using e-mail is to be able to send the same information to several people with little more effort than sending to only one recipient. This, of course, is the reason for the existence of spam.

You should be able to show clients how to send e-mail to multiple recipients, including replying to all, adding additional recipients and forwarding files. They should know how to send e-mails to multiple recipients without displaying the e-mail addresses of all recipients, a facility often known as **blind carbon copies** (Bcc:). This last point is important netiquette as it is very impolite to broadcast the e-mail addresses of others without their permission.

You can find out how to send e-mail to multiple recipients from the help pages of the relevant e-mail services. You'll find a link to this on the opening page of the service.

A more efficient way of emailing multiple recipients is to create groups. The benefit of using groups is that once created you just type the group name and the email will go to everyone in the group AND you will never miss anyone (as long as you created the group correctly in the first place!)



ACTIVITY 1.10

Log on to one of the new e-mail accounts you created in the first exercise and send an e-mail message to multiple recipients, i.e.: send the message to Account No 2, copy it to Account 3 and blind copy it to Account 4. Log on to the three recipient accounts and check that the messages have been received correctly.

Sometimes clients will reach the stage where an e-mail account is no longer required, so we'll take a look now at Closing an e-mail account

Closing an e-mail account

You should warn clients that most web-based free e-mail accounts **expire** if not accessed by the user for a specified period of time, sometimes as short as 30 days. In this way the e-mail account will close itself. However, it is netiquette that e-mail accounts should be closed when they are no longer required. This avoids the problem of people sending e-mails to what appears to be a valid address, when no-one is checking the account.

You can find out how to close an e-mail account from the help pages of the relevant e-mail services. You'll find a link to this on the opening page of the service.

ACTIVITY 1.11

Log on to each of the four e-mail accounts you created in the first exercise and close each of them. (Assuming you no longer want to use them).

Clients will often want to use Internet facilities other than e-mail, so we'll look next at Using chat rooms

Using chat rooms

Chat rooms are **virtual social spaces** on the Internet, where users can communicate with each other. Chat rooms are extremely popular because of their unedited and instantaneous nature. Some chat rooms are used simply for entertainment purposes, perhaps based around a topic such as discussing a daily television soap opera. Others may be used for more serious discussions.

As with most of the Internet, younger clients are often very savvy with the technology and are keen on using chat rooms to communicate with others of the same age and with similar interests. It is easy to see the attraction for young people of being able to access this 'secret' world of anonymous communication where their parents cannot see what they are doing and in principle no holds are barred regarding 'bad' language.

You should be able to inform clients about Acceptable practice in chat rooms

Chat rooms have largely been superceded by other social networking services (Facebook, Twitter and Google hangouts etc) but they are still a feature of many peoples online lives.

Acceptable practice in chat rooms

There has been increasing concern about the use of chat rooms for "grooming". "Grooming" is the term given to interaction between an adult and a child with an end view of sexualising that relationship. "Grooming" is illegal. You need to advise **younger clients** as to how they can keep themselves safe by keeping personal information to themselves and never agreeing to meet alone in person anyone they have a chat room-friendship with. They should report any unwanted attention to their parents and / or the chatroom owners.

You must make adult users of chat rooms aware of what is acceptable when they are using computers in the library – this may be more restrictive than when using home PCs.



ACTIVITY 1.12

Find out your library authority's policy and procedures regarding acceptable use of chat rooms and safeguarding young clients.

More about chat rooms

You can find useful information on this, and other topics at:

http://publib.boulder.ibm.com/infocenter/sametime/v8r0/index.jsp?topic=/com.ibm.collaboration.realtime.help_80/c_stadv_uim_whatis_chatrooms.html

You can find Chat services at:

- **Lycos Chat** <http://chat.lycos.co.uk/>
- **Social networking websites**

Social networking websites and Chat rooms share similar concerns about safety and vulnerable groups. Social networking websites are very popular because they bring together friends and friends of friends who share a common interest. The illusion that it is a community of friends sometimes means that natural caution is abandoned and private details are shared. In many local authorities and organizations access to social networking websites are blocked by firewalls. These website can offer valuable professional tools and there are some examples of these in Unit 4.

Examples of social networking websites include

- **Bebo** www.bebo.com
- **Facebook** www.facebook.com
- **Flickr** www.flickr.com
- **LinkedIn** www.linkedin.com
- **MySpace** www.myspace.com
- **Tumblr** www.tumblr.com
- **Twitter** <http://twitter.com>
- **WindowsLive** www.home.live.com

The ICTL units Digital Culture: Online Communication and Digital Culture: Online Collaboration cover social networking in far greater depth.



ACTIVITY 1.13

Log on to the Lycos chat service listed above and see if you can find a chat room where readers discuss books they have read. Check the Help pages for full details of how to use the service. OR try using a search engine and type "book reading chat room" one example is <https://bookclubreading.com/chat-rooms/>

Clients may experience difficulties in carrying out certain tasks due to security restrictions placed on servers, so let's take a look at Secure servers

Secure servers

Local authorities normally have **secure servers** to protect the local authority and public from potentially hostile breaches. This means that desktops are often “locked-down” and you cannot make changes to the settings on PCs in your library. This can be frustrating – especially when simple changes to the resolution of display, for example, would be useful for visually impaired clients.

Secure servers also have restrictions on adding new software or on downloading executable files.

It may also be worth pointing out to library clients the importance of checking the security of the sites they use when making purchases online. Vendors should always use secure servers for the parts of their systems where customers will be typing in personal and financial details, such as credit card numbers. There are two ways a client can check whether their details are secure:

- They should look for a closed padlock symbol, normally in the address window of the web site.
- They should check that the web address starts HTTPS. The S is the bit which tells them the server is secure.



ACTIVITY 1.14

Check your authority's policy on secure servers and prepare a brief explanatory note for clients.

Clients may wish to convert paper-based materials, such as photographs, to digital images so they can be sent as e-mail attachments, so let's have a look at Scanning images and saving to disk...

Scanning and saving images

Scanning of images and saving these to disk has increased with the proliferation of **inexpensive** scanning devices. Many clients will wish to send copies of photographs to their family via e-mail.

You should be able to demonstrate to a client how to scan an image – either of text or pictures - and save it to disk.

(Note that the scanned files will often be large and may need to be reduced in size if they are to be attachments to e-mails.)

Since there is such a range of types of scanner and associated software, we cannot realistically give instructions for use here.



ACTIVITY 1.15

Practice using your locally-available scanner and software to scan and save both text and images. Find out how to reduce the resulting file by compressing it so that it will be acceptable as an e-mail attachment. Note down any points which you will want to make your clients aware of.

12.2 Using ICT to support clients with special needs or specific language requirements

12.2.1 Introduction

This section relates to the ways in which ICT can support clients with special needs or those with specific language requirements. For example, this client group might include those **visually impaired**, those whose **first language is not English**, those **disabled**, those with **literacy difficulties**, and those with **dyslexia or learning disabilities**.

Many of the clients in this group will be **mature and capable** with the same information needs as everyone else and could benefit from some of the assistive technologies to enable them to access the wide range of resources.

Sensitivity is required in assessing the ability and aptitude of the client. It is important to remember that disabilities may not affect the reading level of clients or their interests. It may be useful to use pictograms instead of text in signage for some clients in this group.

Websites for those with special needs or specific language requirements

When dealing with clients having special needs or specific language requirements, special care should be given to the **appropriateness** of recommended websites. As well as the criteria applied to assessing the appropriateness of websites in general, you should exercise care to ensure that clients are directed towards accessible sites with appropriate content and format. For example, visually impaired people may be unable to access websites which are incompatible with software which they rely on.

Clients with Impaired Vision

Clients with impaired vision may be able to use a normal monitor screen if the settings are adjusted to give **large font size** and **high contrast**. However, others will need to use a software package which will read out the text on the web page – a screen reader.

Some web sites will not work well with a screen reader.

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Before proceeding, can you think of features on a website page which would cause difficulties for a client with impaired vision using a screen reader?

Problems for clients with impaired vision

The main problems are caused by screens which have no text. If it is not possible to read meaningfully only the text on the website page, then the screen reader will not be successful.

So the following are the problem areas:

- Web pages which **overly rely** on graphics
- Web pages which have graphics or photographs with **no alternative text** explanation
- Web pages with text which is **presented within a graphic**
- Web pages which use **explanatory animations**

The worst offenders can be sites that start in Flash with **no text option**, so that the user gets no information from the screen reader and doesn't know if the site is open or not.

Screen readers

Some problems have been reported in using screen readers with early version of Adobe Acrobat, but these have been overcome in later versions. You can find more information about this at:

<http://www.adobe.com> (type screen readers in the search window)

A good example of a screen reader which is well liked by users is JAWS for Windows. You can find more information about it at: http://www.freedomscientific.com/fs_products/JAWS_HQ.asp

Many libraries use **Supernova**, which incorporates a screen reader called **HAL**. Supernova also incorporates a very good monitor screen magnification element - so it can help partially sighted clients. You can get further information (and download an evaluation copy) from: <http://www.synapseadaptive.com/dolphin/>

The Royal National Institute for the Blind (RNIB) site gives a useful list of access software at: http://www.rnib.org.uk/professionals/softwareandtechnology/softwareaccesscentre/Pages/software_access_centre.aspx

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ACTIVITY 2.1

To get a better feel for screen reader software and especially to assist those clients with visual impairment, visit the RNIB site mentioned above and follow the links to some of the sites listed. Download evaluation copies of a few of the software packages and try them out.

Colour blindness

Colour blindness is another factor which can affect a client's ability to use a website. There are software packages which:

- a) permit a person who is not colour blind to view a web page **as it would appear to a colour blind person**. This can be a useful check for library staff before recommending a website.
- b) Use **image processing techniques** to make web pages clearer for those with colour blindness.



ACTIVITY 2.2

Go to <http://colorfilter.wickline.org/> and try the procedure on some webpages which you commonly use. How readable would they be to a client with colour blindness?

An alternative colour blindness simulator just for images is <http://www.color-blindness.com/coblis-color-blindness-simulator/>

The SLIC website (<http://www.slainte.org.uk/accessandequity/webdesign.htm>) provides information on webpage design support and PC accessibility issues.

Clients with specific language requirements

When assisting clients with specific language requirements, it is worth turning to the Google search engine. This provides a useful set of **language tools** for finding information and/or websites in specific languages and for translating between a range of languages.

ACTIVITY 2.3

Use the Google language tools to:

- a) translate a favourite web page into another language;
- b) translate a foreign-language web page into English.

Another site which offers translation facilities for text and web pages is: <http://www.babelfish.com/>

- c) Try the two tasks above using Babelfish as well. Which site do you think gives the best translations?

d) It's important to note that the translation might be a little rough around the edges. Try translating a simple phrase to another language, and then back into English. You might notice quite a change in the meaning of the phrase!

12.2.2 Evaluating websites against best practice guidance

Websites which can help assess the suitability of website material include:

- **World Wide Web 3 Consortium** <http://www.w3.org/WAI/>
- **WAVE Web Accessibility Evaluation Tool** <http://wave.webaim.org/>
- **SLIC** <http://www.slaiente.org.uk/accessandequity/equityindex.htm>

Look at the World Wide Web 3 Consortium pages and find out exactly what Best Practice in terms of web accessibility means.



ACTIVITY 2.4

Follow the link to WAVE given above and use the tool to check the accessibility of a few of your favourite websites.

12.2.3 Assistive technologies

Technology can help to balance the difficulties encountered by some client groups. For example, those with motor impairment can access PCs with the aid of a large **track ball mouse, touch screens, adapted keyboards and special software**.

You can find a number of companies which specialise in supplying assistive technology equipment. An example is Inclusive Technology at: <http://www.inclusive.co.uk/>. They have an online catalogue which groups the various items in broad headings.



ACTIVITY 2.5

Browse the Inclusive Technology catalogue. This will give you a good overview of what is available in hardware assistance.



ACTIVITY 2.6

Find out what is available within your own library and library service which would support clients requiring assistive technology. Make a note on each item for future use.

Assistive technologies for clients whose first language is not English

You should also be able to use software or keyboard adaptations for people whose first language is not English. It is important for you to know about both what is available locally and organisations to whom clients can be referred.

Adaptive furniture can be of great use to help clients. You can see an on-line catalogue on the website of Synapse Adaptive here: <http://www.synapseadaptive.com/>

They cover many adaptive technologies but if you look for hardware and then ergonomics, you will find a number of desk and chair items.

12.2.4 Changing software and keyboard settings

Although assistive technologies are widely available, sometimes all that is required to improve access for a client is to change the keyboard or software settings. This can allow the enlargement of text, icons and the speed of a mouse click to the client's comfort.

Windows offers a huge range of **accessibility features**, including adjusting Display Options, adjusting Mouse Options, adjusting Keyboard Options, adjusting Internet Options, adjusting Sounds and Audio Options, adjusting Taskbar and Menu Options, adjusting User Accounts Options, adjusting Speech Options, Utility Manager, On-Screen Keyboard, Narrator and Magnifier.

The Microsoft website has details of these at: <http://www.microsoft.com/enable/>

Windows has an accessibility wizard which can take the client through the various PC settings.



ACTIVITY 2.7 If you are using Windows 8 visit <http://www.microsoft.com/enable/products/windows8/> for help. Try the features.

If you have access to Windows XP you can use the **Accessibility Wizard** to explore the Accessibility features. You can start it by clicking on: **Start > All Programs > Accessories > Accessibility > Accessibility Wizard** OR **Start > Run** type accwiz in the Open window.

If you are using an earlier version of Windows, or another Operating System, check your local help files to find out what options are available.



ACTIVITY 2.8

From the information sources above, or additionally from the **AbilityNet MyWay** site at: <http://www.abilitynet.org.uk/search/node/myway> make a note of the accessibility features you are likely to require to show to clients. Jot down the steps you have to carry out to implement them.

12.2.5 Voice synthesis and voice recognition

Voice synthesis software can be used as an alternative to keying in and outputting in text format. There are two types of software required for this.

Voice recognition software allows a client via microphone to give spoken commands to the computer, to allow PC use without a keyboard.

Voice output from the PC is achieved by software which reads out what is displayed on the screen. This is of great use to clients with vision problems.



ACTIVITY 2.9

Find out which of these types of systems are available in your own library service.

Voice synthesis and voice recognition products

There are a number of products available for both voice synthesis and voice recognition, including **Dragon Naturally Speaking**, **CoolSpeech** and **Microsoft Speech Server**. You can find further information about one of the best known products at the following web site:

- **Dragon Naturally Speaking:** <http://www.scansoft.com/naturallyspeaking/>

There are of course many others

Some operating system versions have voice synthesis built in. Again the AbilityNet MyWay site at: <http://www.abilitynet.org.uk/search/node/myway> has information on this topic

Of course many people now use mobile devices to access information and people using iPods or devices running on the Android operating system have a built in Voice Commands (iPod voice Control, Android Voice Actions) functionality.



ACTIVITY 2.10 Select a voice recognition package and a voice synthesis package available to your library service. In each case set up the package and get practice at using it. Jot down sufficient notes so that you can demonstrate it to a client in the future.

12.3 Legislation relating to the use of ICT for storage, manipulation and access of information

12.3.1 Introduction

This section relates to legislation concerning the use of **ICT for storage, manipulation and access** of information. Government legislation has a significant impact on ICT in libraries and staff require a sound working knowledge to ensure that clients can use ICT safely and legally.

12.3.2 Data Protection Act

The **Data Protection Act 1998** applies across the UK and gives legal rights to individuals in respect of their **personal data** held by others. Libraries must ensure that the ways they process personal data of clients and staff, whether manually recorded or computerised, comply with the provisions of the Act. This is particularly relevant to client data stored in an automatic library management system. Such ICT based systems facilitate analysis of client data which would not be possible with manual systems.

The following information is extracted from the **Data Protection Act Fact Sheet**, which can be downloaded from the Information Commissioner's website at: <http://www.informationcommissioner.gov.uk/>.

The Data Protection Act 1998 seeks to strike a balance between the rights of individuals and the sometimes competing interests of those with legitimate reasons for using personal information. We will look at the following useful sections:

- The eight principles of good practice
- The six conditions for fair data processing
- Sensitive data
- Rights under the Act
- Criminal offences created by the Act
- Unsolicited electronic communications
- The role of the Information Commissioner's Office

The eight principles of good practice

Anyone processing personal information must comply with eight **enforceable principles** of good information handling practice. These say that data must be:

- • 1. fairly and lawfully processed
- 2. processed for limited purposes
- 3. adequate, relevant and not excessive
- 4. accurate and up to date
- 5. not kept longer than necessary
- 6. processed in accordance with the individual's rights
- 7. secure
- 8. not transferred to countries outside European Economic area unless country has adequate protection for the individual

The six conditions for fair data processing

At least one of the following conditions must be met for personal information to be considered fairly processed:

- • 1. the individual has consented to the processing
- 2. processing is necessary for the performance of a contract with the individual
- 3. processing is required under a legal obligation (other than one imposed by the contract)
- 4. processing is necessary to protect the vital interests of the individual
- 5. processing is necessary to carry out public functions, e.g. administration of justice
- 6. processing is necessary in order to pursue the legitimate interests of the data controller or third parties (unless it could unjustifiably prejudice the interests of the individual)

Sensitive data

Specific provision is made under the Act for processing **sensitive personal information**. This includes racial or ethnic origin, political opinions, religious or other beliefs, trade union membership, physical or mental health condition, sex life, criminal proceedings or convictions.

For personal information to be considered fairly processed, at least one of several extra conditions must be met. These include:

- Having the explicit consent of the individual
- Being required by law to process the information for employment purposes
- Needing to process the information in order to protect the vital interests of the individual or another person
- Dealing with the administration of justice or legal proceedings

Rights under the Act

There are seven rights under the Data Protection Act.

- 1. **The right to subject access:** This allows people to find out what information is held about them on computer and within some manual records.
- 2. **The right to prevent processing:** Anyone can ask a data controller not to process information relating to him or her that causes substantial unwarranted damage or distress to them or anyone else.
- 3. **The right to prevent processing for direct marketing:** Anyone can ask a data controller not to process information relating to him or her for direct marketing purposes.
- 4. **Rights in relation to automated decision-taking:** Individuals have a right to object to decisions made only by automatic means e.g. there is no human involvement.
- 5. **The right to compensation:** An individual can claim compensation from a data controller for damage and distress caused by any breach of the act. Compensation for distress alone can only be claimed in limited circumstances.
- 6. **The right to rectification, blocking, erasure and destruction:** Individuals can apply to the court to order a data controller to rectify, block or destroy personal details if they are inaccurate or contain expressions of opinion based on inaccurate information.
- 7. **The right to ask the Commissioner to assess whether the Act has been contravened:** If someone believes their personal information has not been processed in accordance with the DPA, they can ask the Commissioner to make an assessment. If the Act is found to have been breached and the matter cannot be settled informally, then an enforcement notice may be served on the data controller in question.

Criminal offences created by the Act

A number of **criminal offences** are created by the Act and include:

Notification offences: This is where processing is being undertaken by a data controller who has not notified the Commissioner either of the processing being undertaken or of any changes that have been made to that processing.

Procuring and selling offences: It is an offence to knowingly or recklessly obtain, disclose or procure the disclosure of personal information without the consent of the data controller. There are some exceptions to this – for example, where such obtaining or disclosure was necessary for crime prevention/detection. If a person has obtained personal information illegally it is an offence to offer or to sell personal information.

Unsolicited electronic communications

The **Privacy and Electronic Communications (EC Directive) Regulations 2003** cover, amongst other things, unsolicited electronic marketing communications.

- **Unsolicited marketing calls** should not be made to individual subscribers who have opted out either directly or by registering with the central stoplist, the **Telephone Preference Service** (TPS), or to corporate subscribers (e.g. companies) who have objected either directly or by registering on the Corporate TPS.
- **Unsolicited marketing faxes** should not be sent to individuals without their prior consent or to any subscriber who has objected, either directly or by registering on the Fax Preference Service (FPS).
- **Unsolicited marketing emails or SMS** should not be sent to any individual subscriber who has not consented unless the email address or phone number was collected in the context of a commercial relationship.
- **Wholly automated marketing calls**, i.e. where a recorded message is played and the recipient does not speak to a human being, can only be made where the subscriber concerned (whether individual or corporate) has consented.

The role of the Information Commissioner's Office

The ICO has specific responsibilities for the promotion and enforcement of the DPA. Under the Data Protection Act, the Information Commissioner may:

- serve information notices requiring data controllers to supply him with the information he needs to assess compliance.
- where there has been a breach, serve an enforcement notice (which requires data controllers to take specified steps or to stop taking steps in order to comply with the law). Appeals to these notices may be made to the Information Tribunal.

Other Useful DPA websites

There are several websites which give more details and explanations. We have listed some below:

- The **Data Protection Act** itself can be found at: <http://www.hmso.gov.uk/acts/acts1998/19980029.htm>
- The website of the **Information Commissioner** is at: <http://www.informationcommissioner.gov.uk/>
- The website of the **Scottish Information Commissioner** is at: <http://www.itspublicknowledge.info>

Useful information on this topic can also be found on the CILIP website.



ACTIVITY 3.1

Search the CILIP website at: <http://www.cilip.org.uk> for ‘data protection act’. Make a note of any aspects of data protection which are particularly relevant to your own work.

Another aspect of data protection is that related to **Government initiatives** on privacy and data sharing led by the Ministry of Justice, which aim to increase the data which can be shared by public bodies. You can find information on the website of the Ministry of Justice at: <http://www.justice.gov.uk/information-access-rights/>

12.3.3 Copyright legislation

Copyright legislation is UK-wide and a number of Statutory Instruments have been put in place to ensure that **European Copyright Directives** are enacted in the UK. The key Act is the **Copyright, Designs and Patents Act 1988** which determines what is illegal and what is permissible. ’

The purpose of copyright is to ensure that the creator (person who holds the intellectual property right) or owner of the copyright can:

- derive any financial benefit relating to their material
- have control over the way in which their material is used.

Regular revisions of copyright legislation take place so information professionals must keep their knowledge up to date.

Copyright law is very complex but it is important that you have a sound knowledge of what is permissible and the role of library staff in enforcing copyright.

The **Intellectual Property Office** website at: <http://www.ipo.gov.uk/> has a good summary of copyright issues. The information on the following pages is extracted from there and summarises the principal points.

Ownership and duration of copyright

The author is the first owner of copyright in a **literary, dramatic, musical or artistic work**. In the case of films, the principal director and the film producer are joint authors and first owners of copyright. The main exception is where a work or film is made in the **course of employment**, in which case the employer owns the copyright. The copyright in sound recordings, broadcasts and published editions generally belongs to the record producer, broadcaster or publisher.

Copyright protection in the UK is **automatic** and there is **no registration system** - so there are no forms to fill in and no fees to pay.

Copyright is a form of **intellectual property** and, like physical property, can be **bought and sold, inherited or otherwise transferred**. A transfer of ownership may cover all or only some of the rights to which a copyright owner is entitled. First or subsequent copyright owners can choose to **license** others to use their works whilst retaining ownership themselves.

Copyright in a literary, dramatic, musical or artistic work (including a photograph) lasts until **70 years after the death of the author**. The duration of copyright in a film is 70 years after the death of the last to survive of the principal director, the authors of the screenplay and dialogue, and the composer of any music specially created for the film. **Sound recordings** are generally protected for **50 years from the year of publication**. **Broadcasts** are protected for **50 years** and **published editions** are protected for **25 years**.

The following are useful websites providing information on copyright:

- **Intellectual Property Office** <http://www.ipo.gov.uk/>
- **Copyright Licensing Agency** <http://www.cla.co.uk/>
- **Copyright, Designs and Patents Act 1988** http://www.hmso.gov.uk/acts/acts1988/Ukpga_19880048_en_1.htm

Copyright and the Internet

With the proliferation of electronic communications via the Internet, there has been a massive opportunity created for the **infringement** of copyright.

The Internet provides text and illustrations in electronic format, making it easy for the unscrupulous user to **cut and paste** web material into their own documents. You will already be familiar with copyright law restrictions on copying material from books and journals. Similar provisions apply to material from the Internet. It is important to make clients aware that they should check the legality of making multiple copies of textual material from Internet sites.

The greatest areas of commercial concern have been copyright infringements involving **music files** and **still and moving images**. It is clear to see that a digital file can be very easily and at virtually no cost copied and distributed anywhere in the World via the Internet. The creator of the original work is excluded from the process and thus receives no financial reward. Not surprisingly the media companies have been in the vanguard of creating means of prevention. A number of **defensive methods** have been created to counter copyright infringement in the digital domain.

Digital Rights Management (DRM)

This is a large area but the greatest and most visible use is (and will be even more so in the future) the **prevention of copying of films** (movies) from DVDs. This requires mechanisms to be active in one or both of the DVD disk itself and the DVD player or computer used. Examples are:

- the need to keep a Satellite Television receiver box connected to the public telephone network
- certain high definition film disks can only be played back on a computer which is connected to the Internet
- the very latest large screen television displays will need a special module to display the coming high definition DVD films. Absence of the module disables the output from the

DVD player. The existence of the module guarantees that the incoming digital signal is not being copied.

- the regional coding of DVDs which does not allow a DVD disk purchased in the USA to be played on a European region DVD player.

You can find additional information at: http://en.wikipedia.org/wiki/Digital_rights_management and at: <http://www.ipo.gov.uk/types/copy/c-other/c-protect.htm>

Digital watermarking

This is a computer encryption which is inserted into the image. It is of particular use with images which are placed on websites and thus easily copied. It is invisible to the casual user but provides a **tracking mechanism** for owners. It is a digital code, which can be unique to the image or shared across the owner's other images. You can find additional information at: http://en.wikipedia.org/wiki/Digital_watermarking and http://www.webopedia.com/TERM/D/digital_watermark.html

Digital fingerprints are unique labels inserted into different copies of the same content (e.g.: an e-book, video or music file) prior to distribution. Each digital fingerprint is assigned to a specific recipient, and thus provides the capability to trace the culprits who use their content for unintended purposes. Fingerprints should be closely associated with the content and difficult to remove.



ACTIVITY 3.2

Visit <http://www.steganos.com> and download the test version of Steganos Security Suite. Install the program and try using it to hide watermarks (or other messages) in GIF pictures.

12.3.4 Intellectual Property Rights (IPR)

The growth of Internet use and ease with which files and ideas can be transferred across continents has led to tighter regulation of and concern for **intellectual property rights**. Intellectual property refers to the rights of the thought process and intellectual creativity which developed the work. Information professionals should be aware of the Intellectual Property Rights issues. You should be aware that intellectual property is the **legally enforceable** right of the owner.

Most countries have laws regulating the copying of inventions, identifying symbols and creative expressions. The UK laws cover four main types of intangible property: **patents, trademarks, copyrights and trade secrets**, referred to collectively as “intellectual property.”

Intellectual property has many of the same characteristics as tangible property. It is an asset which can be bought, sold, licensed, exchanged or given away. The intellectual property owner has the right to prevent unauthorised **use or sale** of the property.

Clients should be aware that they should not use library computers (or any others) to do anything which infringes someone else's intellectual property rights, e.g.: by copying content from someone else's website into their own document, or illegally copying music files.

You can find lots of additional information at The Intellectual Property Office <http://www.ipo.gov.uk/>

12.4 Freedom of Information legislation and information access issues

12.4.1 Freedom of Information legislation

Freedom of Information legislation was introduced across the United Kingdom at the beginning of 2005. The Freedom of Information (FOI) legislation is different for **Scotland** from that in the rest of the UK, but the information given here is generally applicable throughout the UK. However you should always check the precise details against the relevant website for your own country.

You can find a comprehensive description of the act and its implications at the website of the Information Commissioner at: http://www.ico.org.uk/for_organisations/freedom_of_information and for Scotland at the websites of the Scottish Information Commissioner at: www.itspublicknowledge.info

The FOI legislation provides a right of access to the information of public bodies by individuals. Information can be in print, electronic, video or audio format.

Working in a library you need to be aware of the procedures so that you can assist a client to make an information request on the basis of FOI legislation. You should also be aware of the position regarding your own local authority and its requirements to disclose information.



ACTIVITY 4.1

A client approaches you with a request involving the FOI legislation. He wishes to find out how much money is spent by the local authority on traffic calming measures. Go to the website appropriate to your geographical location and make notes on the process of requesting information which will be useful for clients in the future.

Freedom of Information Act

The following details on the FOI legislation is based on information from the **Information Commissioner's** website:

The **Freedom of Information Act** enables people to gain access to information held by public authorities in two ways:

Publication Schemes

Every public authority must make some information available as a matter routine through a **publication scheme**. Information that is included in such a scheme must be made available to the public. A publication scheme is both a public commitment to make certain information available and a guide to how that information can be obtained.

General right of access

Any person has the right to make a request for **information held by a public authority**. The authority must usually respond to this request within 20 working days. This right came into force on the 1 January 2005.

Exemptions

The Act recognises that there are grounds for **withholding information** and provides a number of **exemptions** from the right to know, some of which are subject to a public interest test. The Act also sets out procedures for dealing with requests, such as **time limits** for compliance and **fees** that must be charged.

Making complaints

The Information Commissioner is the **independent regulator** of the Act, with responsibilities to promote the legislation and enforce compliance with its provisions. This includes making decisions as to whether a public authority has dealt with requests properly.

12.4.2 Acceptable Use Policies

For legal reasons each library must have an **Acceptable Use Policy (AUP)** covering client access to ICT equipment and the Internet. Each authority will have an individual AUP policy reflecting the local circumstances. Each client using the library facilities is required to indicate acceptance of the policy. It is important that the AUP is reviewed on a regular basis to ensure that it complies with current legislation.

The AUP must state that Internet access is monitored using **manual and electronic resources** and that **records of Internet access** are kept. The AUP should also specify the actions and **penalties** which could result from contravention of the AUP. This includes providing the police with information where it is suspected that a criminal act has taken place.

If you select the People's Network Internet Acceptable Use Toolkit there are several examples of local authority AUPs.



ACTIVITY 4.2

Search the internet to find examples of local authority AUPs.



ACTIVITY 4.3

Obtain a copy of the AUP for your own library. Read it over and make a set of notes to enable you to explain the various points to a client new to the library computer facilities.

12.4.3 Content filtering

Internet filtering systems used in libraries are designed to **prevent clients accessing unsuitable material**. When the filtering system is turned on, users cannot open or link to web sites that the filtering system recognises as unsuitable.

The filtering system is a software package which can be installed on a PC or a server (to regulate multiple machines). The software can use one or both of two principles.

- 1. When a site is requested, it will check the URL of the site against a list of **proscribed sites**. If the site is on the list, the software will block access. The list is updated at periodic intervals by the software supplier.
- 2. When a site is requested, the software will check over the site and attempt to recognise **key words** which would indicate an unsuitable site and then block access.



Before proceeding, think of a disadvantage for each of the above methods.

Approaches to content filtering

Although a useful tool, Internet filtering systems are not foolproof.

The first method depends on the list of proscribed sites being complete. It would be impossibly expensive for every website on the Internet to be rated using a human observer. There will also be a **delay** in a new unsuitable site appearing and being added to the list.

The second method suffers from the difficulty of **placing keywords into context**. An example being, it has difficulty in distinguishing between the names of body parts used in a pornographical or medical context. Another example is that access may be blocked to sites containing innocuous words, one component of which may be of a sexual or profane nature e.g. Essex (though more complex filters are now sometimes able to recognise such cases). Also, this method checks only for unacceptable text, not unacceptable images or speech.

Any blocking system can be potentially over-ridden by users with technical knowledge, or by using one of the many proxy sites which allow you to circumnavigate blocks by browsing through a proxy server.

Reporting websites is another way of controlling what is available, see <http://www.iwf.org.uk/>

The Family Online Safety Institute (formerly The Internet Content Rating Association (ICRA))

FOSI provide a set of categories and levels within each category:

- The presence or absence of nudity
- The presence or absence of sexual content
- The depiction of violence
- The language used
- The presence or absence of user-generated content and whether this is moderated
- The depiction of other potentially harmful content such as gambling, drugs and alcohol

The user's browser has to be configured to use the system. Clearly there are obvious weaknesses here in that website developers are not required to use the ratings, and they may be misused. However, similar to the **age ratings' associated with films and computer games, this may in the long run be the best possibility for filtering**.

Since there are weaknesses in each approach, filtering can not replace vigilance or simple common sense from library staff.

For more information visit <http://www.fosi.org/icra/>



ACTIVITY 4.4 Find out the filtering policies in place in your local authority and what your own responsibility is.

Walled Gardens

The walled garden approach is often used for young clients. Here, instead of trying to block access to possible unsuitable sites and allowing access to all other sites, the "walled garden" only offers access to **pre-selected websites**. This is a much simpler approach. Instead of trying to cope with rating or searching through the 25,270,000,000 websites catalogued

by Google today, a small number of hand picked sites are allowed to be browsed. Of course the quality of this service relies upon the nature of the vetting before access is allowed.

The disadvantage is of course the **exclusion of many potentially useful** sites. There have also been issues with e-mail and search engines allowing a hole to be made in the wall.

Social networking websites, such as <http://www.facebook.com> and <http://www.flickr.com>, can also be regarded as walled gardens. This is because the owner can control the range of people who view their messages and updates. Another aspect of walled gardens is the barriers which prevent the free flow of information and this is also true of social networking sites with their custom language and proprietary nature. This means that information can't be transferred or access from one platform to another.

Suppliers of filtering software

The following sites are suppliers of **filtering software**, mainly aimed at young clients, which also provide lots of useful information on internet safety:

- **SafeSurf** <http://www.safesurf.com>
- **CyberPatrol** <http://www.cyberpatrol.com>
- **NetNanny** <http://www.netnanny.com>

Trial versions of several of these can be downloaded from the relevant website.



ACTIVITY 4.5 Download an evaluation copy of CyberPatrol and try it out.

12.4.4 Internet safety with younger clients

Clearly the previous section covering content filtering is particularly applicable to young clients. It may be appropriate to **reserve particular machines** for particular user groups with regard to the type of material which may be accessed. This can also be managed by user ID login procedures.



ACTIVITY 4.7

Find out what is the situation in your own library with regard to the reserving of particular PC's for restricted access to Internet materials.

Undoubtedly, the younger clients will have the most restricted access. There are serious risks to younger clients with the possibility of someone being hurt, exploited or abused as a

result of personal information being posted online or falling victim to “grooming” (covered in Outcome One of this unit).

There are many useful websites which promote safe use of the Internet to younger clients, their parents and teachers. Here are three we would recommend you look at:

- ClickThinking at <http://www.scotland.gov.uk/Publications/2010/02/09154928/1>
- Kidsmart at <http://www.kidsmart.org.uk/>
- UK Government Internet Safety Advice at <https://www.gov.uk/search?q=internet+safety>
- DirectGov Internet Safety at <http://webarchive.nationalarchives.gov.uk/20121015000000/http://www.direct.gov.uk/en/Parents/Yourchildsshealthandsafety/Internetsafety/index.htm>

Illegal material

Much material exists on the Internet which it is a criminal offence to access. The catchphrase is ‘If it is illegal off-line - it is illegal on-line’. Three types of Internet content are generally regarded as illegal in the UK:

- images of child abuse hosted anywhere in the world
- criminally obscene images hosted in the UK
- criminally racist content hosted in the UK

Even though **filtering** and **acceptable use policies** are in place in local authorities, breaches can very easily happen. It is important that you are aware of the local procedures for dealing with such situations.



ACTIVITY 4.8

Here are two scenarios involving a client accessing illegal materials. Consult your library service’s Acceptable Use Policy and/or staff manual and make notes of what action you would take in each case.

1. An adult client is observed systematically accessing criminally racist content on a public access PC.
2. An adult client accidentally accesses images of child abuse whilst carrying out a genuine information search on another topic.

Sources of further information

Go to **Children Exploitation and Online Protection** <http://www.ceop.gov.uk/>

This website points to helpful websites for young people and parents containing information about staying safe online at: <http://www.thinkuknow.co.uk/> .

The **Internet Watch Foundation** at: <http://www.iwf.org.uk/> is a site allowing the reporting of websites which host illegal content. It is widely supported and has lots of links and information on the subject of illegal content.

13 Net Navigator

This page is designed for the use of students undertaking the **Diploma** (Diploma ICTL¹) or the **Advanced Diploma** (Advanced Diploma ICTL²) in **Applications of ICT in Libraries**.

CHANGES TO THE QUALIFICATION The Diploma and Advanced Diploma have been superceded by the Professional Development Award in Applications of ICT in Libraries at levels 7 and 8 (English and Welsh levels 4 and 5). They consist of much the same content as the Diploma and Advanced Diploma but the PDAs include two new Digital Culture units.

These qualifications were developed by the **Scottish Library and Information Council (SLIC)**³ and are validated by the **Scottish Qualifications Authority (SQA)**⁴

Carrying Out the Net Navigator Role is an optional unit in the PDA in ICTL Level 8 (Advanced Diploma programme).

Information regarding the **background to the courses**, **content** and **certification opportunities** can be obtained by following the **Diploma** (Diploma ICTL⁵) or the **Advanced Diploma** (Advanced Diploma ICTL⁶) links.

Further information can be obtained from angela.lees@sqa.org.uk

13.1 Define the detail of a complex enquiry in conjunction with the client

13.1.1 Reference interview techniques for complex enquiries

In this outcome we will explore how you should tease out the details of a complex enquiry posed by a library client. We define a complex enquiry as one where:

- the sources to be searched for information are **not obvious** at the outset of the inquiry
- the precise nature of the topic requires to be **teased** out in some detail with the client
- a minimum of **3 variables** are linked in a Boolean search.

From this we can see that the typical client for such complex enquiries is likely (but not always) to be a person with some **knowledge or expertise** in the subject area. Where this

1 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

2 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

3 <http://www.slainte.org.uk>

4 <http://www.sqa.org.uk>

5 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

6 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

is so, you should capitalise on this at the initial stage and gain as much specific information as possible from the client.

Defining the nature of the enquiry

Defining the precise nature of the enquiry in conjunction with the client is often referred to as the **reference interview**. However, you may not be able to carry this out face to face. Instead you may carry out the interview over the telephone. Whether communicating face-to-face or by phone, do remember that the reference interview is a **two-way interaction** or dialogue and you must take responsibility for the efficiency of the communication process.

You may use e-mails as part of the process, but we would recommend that, with complex enquiries, the bulk of the reference interview is oral. With a detailed and complex enquiry, you would find it difficult to gather from the client the level of detail which you require from the client through e-mails alone.

By the end of the reference interview you should be confident that the nature of the complex enquiry has been **fully explored** and that the information required by the client has been specifically defined.

The reference interview also provides the opportunity to **establish any special needs** of the client e.g.: visual or auditory impairment. This requires a **tactful** and **sympathetic** approach. You may need to ask for **assistance** from a colleague with specialist knowledge on disability issues.

And finally, do remember to record **contact details** for the client. In the excitement of exploring the enquiry and establishing the client's precise needs, it is all too easy to forget this important information. So check at the end of every reference interview that you have a record of the client's name, address, telephone, fax and e-mail details, as appropriate. If you will be phoning the client, it is also polite to note **when** it is convenient for the client to receive your call.

Communication skills

Good communication skills are key to the reference interview. This unit outcome provides a good opportunity for **practising** and **refining** your communication skills. These include:

- Appropriate spoken language
- Appropriate body language
- Good feedback, especially on the telephone
- Note taking
- Clear and grammatical e-mails

We will briefly examine each of these.

Spoken language

You should use language which is **appropriate to the client**, avoiding talking down to the client or, at the other extreme, baffling the client with **specialist jargon**. If you do

have to use a term which the client may not understand, e.g. “search engine syntax”, be sure to explain it.

QUESTION TextEntry1: Explain Dark Internet

Conversely a client with expertise in the field they are enquiring about is likely to use **specialist or technical vocabulary** when describing the search topic. Such vocabulary can be useful for you when you are deciding on your search terms (see Outcomes 2 and 3) but make sure that you fully understand the meaning of any such specialist terms. The client should be able to explain them to you.

Body language

In face-to-face situations, use appropriate body language designed to set the client at ease and promote effective communication. Smile and greet the client by name if possible. Lean forward slightly and use eye contact to show your interest in the conversation. Try to carry out the interview in a place where both you and the client are sitting comfortably and at the same level, preferably side by side.

Feedback

You should use appropriate **feedback techniques** to ensure understanding of the client’s responses. For instance, you might:

- **Rephrase** what the client has said and repeat this back to them
- Read out a **summary** of the enquiry based on the notes you have made.

With telephone communications you will have to be careful in order to make sure that you fully understand what the client says because you will get no clues from their **body language**. See if you can pick up clues from the tone of the client’s voice. Conversely, make sure that your tone is positive and encouraging. Smiling as you speak into the phone generates a **pleasant tone of voice** which encourages helpful responses.

Note taking

In both face to face and telephone interactions, it is essential to take **written notes** of the main points of the conversation. These notes are your reference for checking that you have fully understood the details of the client’s enquiry. Full notes are also useful if you have to put the query on one side for actioning later or pass it on to a colleague to deal with. The more complex the enquiry, the more comprehensive your notes should be.

Writing e-mails

If you are using e-mails to communicate with the client, it is important to establish a **cordial tone** while remaining concise and to the point. Writing **clearly and grammatically** is key to this, as is structuring your e-mail well so that the client can follow it easily and

respond appropriately. Saving e-mails, both those you send and those you receive, provides a record of your communication with the client.

Open and Closed Questions

In the reference interview, you will use both **open** and **closed** questions. These have different uses. It is important to be able to distinguish between the two types of question and to use them appropriately.

Closed questions prompt yes/no or **short factual answers**, such as:

- Q. What is the deadline for my getting this information for you?
- A. Next Tuesday
- Q. Have you checked this reference already?
- A. Yes

Open questions encourage **longer answers**, such as:

- Q. Can you explain briefly what my colleague did last time?
- A. She started with Yahoo and then tried a couple of other search engines as well. I think she was looking it up under something like pagan religions in Wales. We got quite a lot of useful stuff.



Before proceeding, explain at what points during the reference interview and for what purposes you are likely to use:

- a) closed questions
- b) open questions.

Using open and closed questions

Closed questions prompting yes/no or short factual answers are mainly used in the reference interview context to:

- elicit **specific pieces of information** from the client
- gain **confirmation** that your understanding of what the client has said is correct - an important feedback tool.

You are likely to use closed questions

- at the **start of the interview** when you are taking basic personal details of the client
- at intervals **throughout the discussion** when you want to check you have your facts right
- at the **end of the interview** to sum up and agree on future action.

Open questions encourage longer answers and their main uses in the reference interview context are to:

- establish **rappor**t with the client, especially in the initial stages of the interview and with clients who are not already known to you
- set the scene for the enquiry and gain **background information** at the beginning of the discussion
- encourage **input** from the client as the interview progresses.

So you will use both open and closed questions at appropriate times. When framing a question, always think of the type of response you hope to generate and word the question so as to encourage either a **brief** or an **extended** answer.

13.1.2 Eliciting information and advice from knowledgeable clients =

The interview is likely to begin with the client asking you a question. Your task is to probe further until you are fully satisfied that you are clear **exactly what the client wishes to find out**. Remember to ask for clarification from the client about the topic e.g. ask them to spell uncommon words, expand on the topic under investigation etc. This is particularly important with clients who may be subject experts.

While recognising that some clients may be unwilling to give this information, it is helpful if you can establish in some detail the **reasons** why the client wishes the information requested. One important point to establish is whether they require the information for themselves or whether they are enquiring on behalf of someone else.

Determining the starting point

It is important to ascertain the “starting point” of the enquiry in order to avoid wasting time on finding information which the client already knows. This is particularly important with **complex enquiries** for knowledgeable clients, where it may be relatively easy to access information at a simple level, when the client actually requires more sophisticated results.

In a complex enquiry from a specialist enquirer, it is likely that the enquirer has already undertaken some basic searching on their own behalf. Equally a well-informed enquirer may well be familiar with some or all of the **sources of information** in their field. You should therefore try to determine what research the client has already undertaken on the topic and what results were obtained. It is often helpful to ask the client’s opinion on the usefulness or otherwise of particular sources.

A knowledgeable client may also be able to give you some guidance on successful and unsuccessful information searching approaches. However, do not make the assumption that, because the client is knowledgeable about the topic to be investigated, they are well informed about information sources and search techniques. Remember that you are the **information-searching specialist** (while the client is the subject specialist) and so you should critically evaluate any advice on sources and information searching techniques provided by the client.

13.1.3 Determining the nature of detailed information to be provided

Apart from the actual topic of investigation, there are other factors which need to be taken into account before a member of library staff will embark on the information search, e.g.: the quantity, level and format of the required information.

Quantity

We tend to think that our problem in information searching will be an inability to find **enough information**. This can indeed sometimes be the case. But using the Internet often results in the reverse situation – an overabundance of results. Providing too much information is just as unhelpful as providing too little. You must clarify the scale of information required by the client in order to fully satisfy their needs.

If the search produces a large amount of information, you should determine whether the client wishes you to undertake any **filtering** on their behalf before presenting the information or whether they wish to see the full search results. If filtering is requested, you must establish with the client the criteria which are to be applied. Conversely, if the search results are meagre, you should seek guidance from the client as to the possibility of broadening out the search.

Level

It is essential that the information provided is at a **level of complexity** which enables the client's full comprehension but does not patronise the client or tell them what they already know.

The following points give you some guidance as to the likely level of complexity of information required:

- the client's age (But remember age does not automatically bring wisdom! Remember too that some young people can display astonishing knowledge and expertise in subjects which interest them.)
- the client's educational attainment
- the client's display of specialist knowledge
- the client's linguistic ability

Tactful questioning can be used to make an estimation of the points listed above.



Before proceeding, outline a situation where you know all of the above but this knowledge does not tell you the level of complexity of information required.

Other factors affecting level

The most obvious example is where the client is making the enquiry on behalf of someone else. Typical examples would include:

- a **teacher or lecturer** looking for material which could be used by school or college students
- **parents** seeking information for use by their child
- a **specialist** in one field who is a beginner in another e.g.: a consultant surgeon investigating horticulture
- a **therapist or social worker** searching for information for one of their clients

Linguistic ability can be misleading. An overseas visitor with a limited grasp of English or someone with a speech impediment may have **extensive knowledge** of the topic under investigation.

You have probably thought of other similar examples.

Format

The results may include information in various formats. There are many formats available, including several as a result of the introduction of ICT.

- Your search may direct the client to items of library stock, to be used in the library or borrowed for home use. This could include:
 - Printed reference sources or information CD-ROMs
 - Books, audio or video material for home borrowing
 - Magazines and journals
 - Pamphlets or leaflets
- The search results may be bibliographies or lists of website references for the client to follow up.
- The results may be viewed on screen by client, in the form of text, audio or video.



If the client wishes to view the results on screen on a computer outside the library, what must you ascertain before directing the client to websites with audio or video content?

Other factors affecting format

It will be important to check the **specification of the client's computer** in order to be sure that it will support audio or video applications. Another point to ask about is whether the client had a broadband connection. Downloading photographs, movies or sound on a dial-up connection can take considerable lengths of time (It may not even be possible with dial-up technology.) and is costly in terms of telephone charges.

If the search is not carried out with the client present, you must ascertain if the client can **visit the library** at a later time to access the search results or if the information must be in a format which can be e-mailed or posted to the client.

Difficulties may arise if the client has expressed an initial preference for a format in which the information is not actually available. If the information is only available in a **limited number of formats**, you must alert the client to this and ascertain if any of these formats are acceptable.

13.1.4 Constraints

There may be a number of constraints on the material required. These include:

- deadlines for completion
- currency of information
- language
- special needs

Deadlines for completion

It is important for you to gauge the **urgency** of the enquiry. This can range from enquiries where information is required immediately through to those where the results may be presented after some time has elapsed. You should agree with the client on the deadline for completion of the enquiry and also on the action to be taken should this deadline fail to be met for any reason.

If you cannot meet the deadline for completion of the enquiry, clearly it is important to explain to the client the **reasons** for this. Perhaps the enquiry has turned out to be much more complex than was originally envisaged. A specialist member of staff who would normally have handled the enquiry may be absent through sickness. Technical problems resulting in Internet access being temporarily unavailable can also throw your enquiry off schedule.



You have explained to the client the reasons for not meeting the deadline. What else should you discuss with the client?

Difficulties in meeting deadlines

Although the client may well feel more accepting of the situation if you explain the reasons for your failure to meet the agreed deadline, to some extent this is water under the bridge. More important to the client is the action you propose to take in order to **rectify** the situation. With this in mind you should raise the issue with the client at the earliest

possible stage i.e. as soon as you realise that it is unlikely that the original deadline will be achieved. This gets the client on side and enables you and the client to jointly work out how to make the best of the situation. It could be that it is possible to complete part of the enquiry within the deadline, in which case you must agree with the client which aspects should be prioritised. Or perhaps you could arrange for some or all of the information to be provided by another organisation.

The key to **client satisfaction** is to prevent such a situation happening. Be realistic when agreeing deadlines with the client. If you are unsure of how long the enquiry will take, say so. It is better to overestimate than underestimate the time required. That way the client gets a pleasant surprise when the search results are ready earlier than promised.

Currency of information

In your search you will be dealing with two kinds of information:

- **Dynamic information** changes frequently (e.g.: current information on news, weather, government policy, share prices) and it is important for you to locate the most up-to-date data or, in a historical enquiry, the information as it was at the time being investigated.
- **Static information** is always the same (e.g.: historical dates, chemical formulae).

You must also ensure that the client is aware of the need to use **recently updated sources** for dynamic information and the implications which this may have in terms of the timescale and cost of the search. Updating websites to take account of constantly changing information is costly and it may be that there is a charge or a subscription cost to accessing such sites. This is especially true of sites giving financial and performance information about commercial companies or research results.

QUESTION TextEntry1: Static and dynamic information

Language

Some information may only be available in languages other than English. You should be certain of the client's **fluency** in these languages before embarking on the search.

Some websites have a facility which permits you to **choose the language**. This is usually very simple to do.



ACTIVITY 1.1

Go to <http://www.easyjet.com/en/book/index.asp> and view the site in Italian. Look at <http://www.artis.nl/> and change the site from Dutch to English.

Some search engines permit you to specify the language of the websites. Some also have a **translation facility** from a foreign language into English and from English into a foreign language.



ACTIVITY 1.2

Try this out in Google. Go to <http://www.google.co.uk/> and click the “Search the web” option, then click on “language tools”. Search for websites about “**días de fiesta**” (this means holidays) which are written in Spanish and located in Mexico. Choose some Spanish text from one of these websites, copy and paste it into the Translate Box and ask Google to translate it into English for you.

Special needs

The reference interview provides the opportunity to establish any special needs of the client. Some of the most common examples are:

Learning difficulty

For clients with learning difficulties you might have to look for material of a simpler nature, perhaps with more visual or audio content

English as a second language

These clients may prefer material which is not in English. This might mean having the enquirer at your side while you carry out the search so that they can provide assistance with vocabulary. Alternatively, you may be able to pass the enquiry over to a colleague with language skills. (See earlier guidance on language)

Physical impairment

Any material found must be accessible to the client e.g.: websites must be accessible to a visually impaired client. (See Outcome 4 for more details of this.)

If you wish to find out more about the skills and knowledge required for this outcome, the following website may prove helpful.

- <http://www.hals.lib.tx.us/ref123/2interview.htm>

13.2 Demonstrate knowledge of search logic, search engines and features of the Internet

13.2.1 Introduction

This outcome looks at a number of aspects relating to web searches, including the following:

- Boolean logic
- Truncation and wildcards
- Non-obvious search terms
- Grammar of the Internet
- Search engine operation
- Search terms
- How ranking works
- Ownership of the web
- Dark internet and invisible web

Boolean logic

Boolean operators are used to **combine search terms** in order to make the search results more specific.



Before proceeding, can you name the three Boolean operators?

The Boolean operators

There are three Boolean operators - **AND**, **NOT** and **OR**. We will explore how each of these is used.

AND is used to link search terms.

Entering an expression such as **beans AND toast** means that results will be returned only where both words appear. Using the **AND** operator narrows your search and gives a smaller number of results.

OR is used to indicate that any of the terms may be present.

Entering an expression such as **punk OR hair** means that results with either one or the other (or possibly both) will be returned. Using the **OR** operator widens your search and gives a larger number of results.

The **OR** operator is particularly useful where a topic might involve synonyms or near synonyms. A search for **illness AND felines OR cats** will be more wide ranging than **illness AND cats**.

NOT is used to exclude terms.

Entering an expression such as **pop music NOT beatles** might be devised to return results about pop music but excluding results about the Beatles. Using the **NOT** operator narrows your search and gives a smaller number of results.

The **NOT** operator is particularly useful when one of your search terms had more than one meaning. **Telegraph** might refer to electronic communication methods but it is also a

common name for newspapers. A search for **telegraph development NOT newspaper** will eliminate press information.

In fact the expressions are pretty close to what you would say in natural speech:

- I am looking for references to both beans **AND** toast.
- I am looking for sites on either punk **OR** hair
- I am looking for information on pop music but **NOT** including the Beatles.

Sometimes this is easier to understand in diagrams, so let's have a look at Logic diagrams

...

Logic diagrams: the **AND** operator

Imagine that we have a number of websites which give information about children's clothes. Some of these have information only on girls' clothes, some have information only on boys' clothes and some have information on both boys' and girls' clothes. In the diagrams the left hand circle represents all records including the word **girls** and the right hand circle represents all the records including the word **boys**

AND

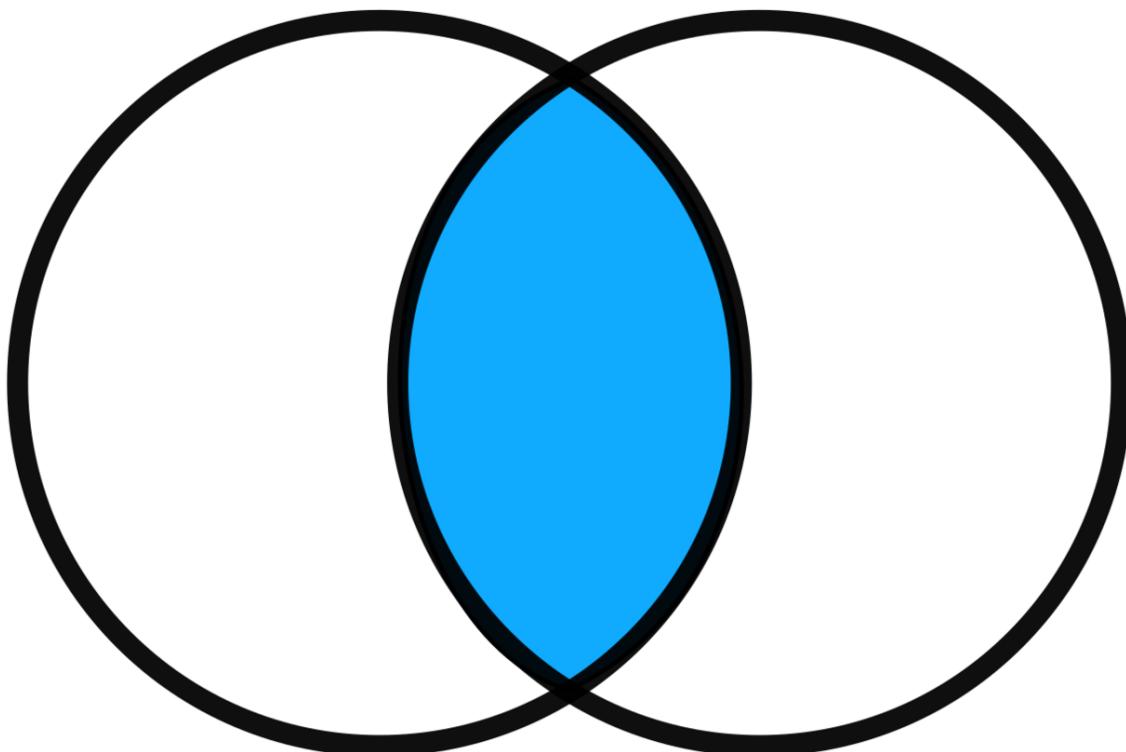


Figure 122

girls AND boys

The shaded area represents the records which have information on both girls' clothing and boys' clothing.

Logic Diagrams: the OR operator

OR

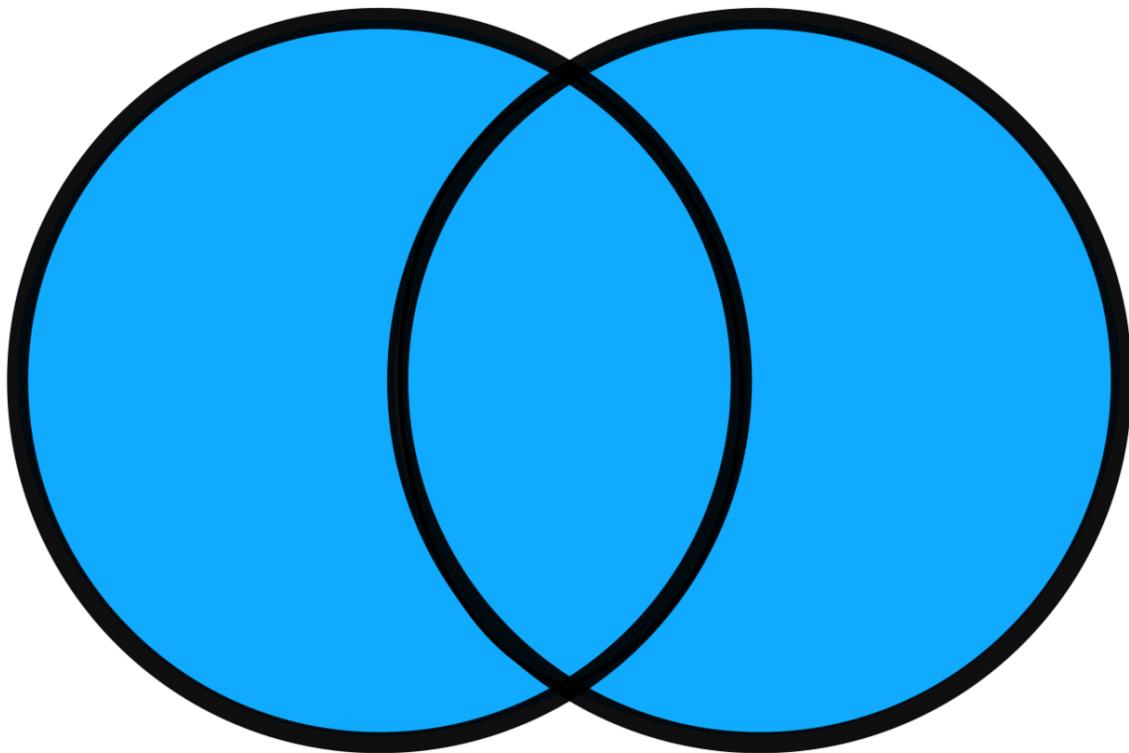


Figure 123

girls OR boys

The shaded area represents the records which have information on only girls' clothing, only boys' clothing or on clothing for both boys and girls.

Logic Diagrams: the NOT operator

NOT

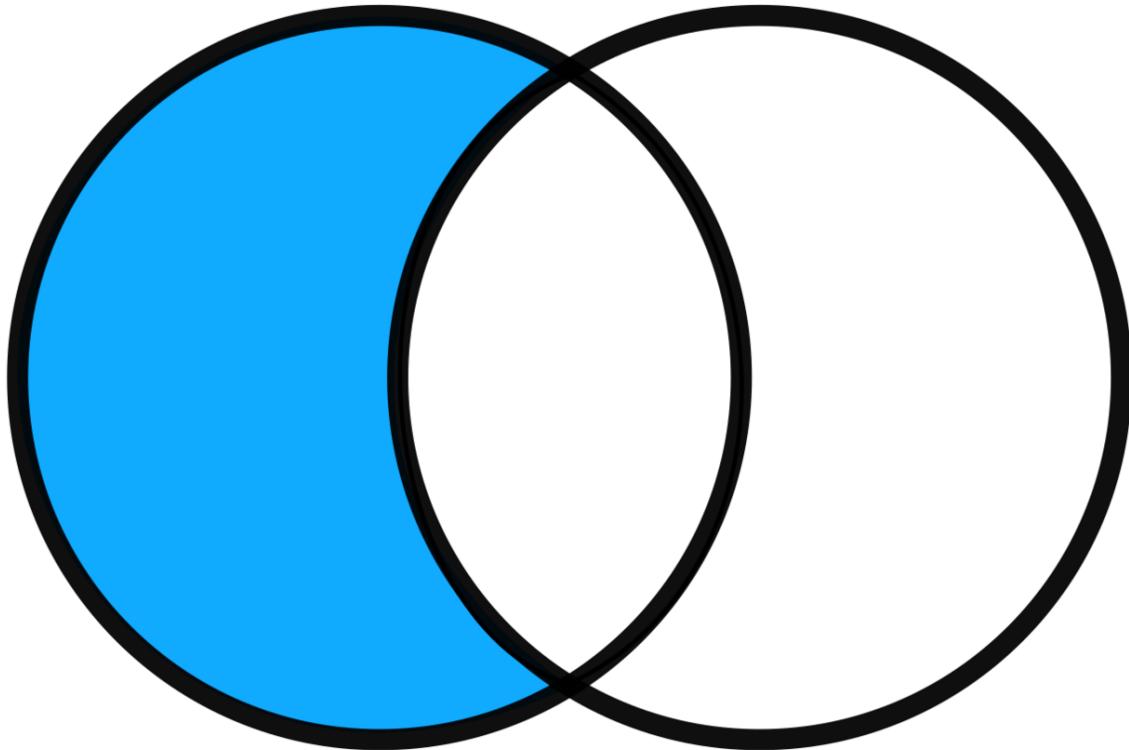


Figure 124

girls NOT boys

The NOT operator excludes all records with information on boys' clothing, and the shaded area represents the records which have with information about girls' clothing only.

Using multiple Boolean operators

It is possible to use multiple Boolean operators. For example, **security AND internet AND banking** narrows down a search on Internet security issues to records which relate only to bank security on the Internet.

QUESTION TextEntry1: Boolean Search

QUESTION TextEntry1: Boolean Search 2

You can see how the use of Boolean operators allows a very precise search statement to be constructed. This should produce a smaller number but a better focused set of hits from a search engine.

Boolean search logic underlies the operation of all search engines but the various search engines have different systems of entering a Boolean expression. Some allow straightforward search statements using capital letters for **AND**, **OR** and **NOT**. However many do not explicitly allow this, the much used Google being one of them.

Constructing precise Boolean searches

It is important to consult the search engine help pages to understand how you can create a precise Boolean search.

There are three approaches:

- 1. Boolean expressions can be **entered directly** into the search box.

We have already covered this. Altavista (<http://www.altavista.com/>) is a search engine which permits this.

- 2. The search engine **makes assumptions** about what you mean when you enter search terms.
- 3. There is an Advanced search facility.

Search engine assumptions

If the search engine makes certain assumptions about what you mean when you enter search terms in a particular way. You must understand the implications of these assumptions.

Basically when you enter more than one term in the search box, the search engine turns this into a Boolean search. The two possibilities are that the engine defaults to an AND or an OR.

Most of the common search engines default to AND. So putting in **carriage clock** should return results with both words included. Of course the words may appear in any order and not necessarily next to one another.

Google allows the use of a minus sign (-) to use the NOT operator. Thus to create the Boolean search expression **sixties pop NOT beatles**, you would enter **sixties pop -beatles** (Note: You must not leave a space between the minus and the search term which you wish to exclude.)

Google assumes that some common words and numbers are never included in the search. Thus if such a word is particularly required, it must be prefaced by a plus (+) sign. This is essentially the Boolean **AND** operator.

Using + and – in this way is not as predictable as you might expect in many search situations. We recommend that they should be used only when there is no alternative. You can find out more here <http://www.google.co.uk/help/basics.html>

There are more features of search engines you can utilise have a look at Googles help pages on Punctuation and symbols <https://support.google.com/websearch/answer/2466433> and on Search Operators <https://support.google.com/websearch/answer/136861?hl=en>

Advanced search facility

Many search engines have an advanced search facility. This allows many refinements, such as specifying the language, format and age of the sites returned. Most advanced search facilities however have a set of choices which allow a Boolean search to be created.



Before proceeding, take a look at the advanced search facility on Yahoo: <http://search.yahoo.com/search/options?fr=fp-top&p>

What expressions are used instead of the Boolean operators AND, OR and NOT?

Advanced searching on Yahoo

Yahoo uses

With all of the words = AND

With at least one of the words = OR

Without the words = NOT

By placing search terms in one or more of these categories, you can set up most Boolean statements you will need in your searching.

Note that it is not only search engines which provide these advanced search facilities. They may also be found within a site. The Houses of Parliament site is an example:

<http://www.parliament.uk/business/publications/>

Other points on Boolean searching

A good website covering Boolean searching can be found at: <http://searchenginewatch.com/2155991>

A final point about the grouping of terms is that if you want to find results which include an exact phrase, most search engines let you do this by placing the phrase in quotes. e.g. “**knitting for children**”. In the advanced search facility, you are offered a box title “**With the exact phrase**”.

This is particularly useful when searching for names where the forename and surname may not be kept together and in order by a search engine.



ACTIVITY 2.1

Try two searches with **land act** and “**land act**” as search terms. You will see that the first search produces results relating to Acts of Parliament which relate in some way to land e.g. we found one about stopping dog fouling on public land. The second search leads us to the various Land Acts.

13.2.2 Truncation and wildcards

Traditionally on-line database searching allowed the use of truncation of search terms. This used a symbol such as ~ to represent one or more letters at the beginning or end of a word. For example, ~fuse could lead to refuse, defuse or infuse and refus~ could lead to refuse, refuses, refused or refusing.

In Internet searching this symbol would be called a Wildcard. Two types of Wildcard exist, commonly represented by ? and *.

- ? indicates the replacement of one character
- * indicates the replacement of any number of characters.

Wildcard symbols can be used in the middle of a word, not just at the beginning and end, e.g.: *familiari?e* for *familiarise* and *familiarize*.

You must keep in mind the pitfalls of over-enthusiastic use of wildcards or truncation. For instance, **men*** would encompass both **men's** and **menstruate**, the latter term being unlikely to be relevant to a search on a male-related topic.

Of course the search engines have their own rules. Google for instance does not have this feature. It carries out its own version of using extensions of words automatically. Many search engines use complex algorithms to produce their results which makes the use of wildcards or truncation inappropriate.

Most sites which permit wildcard searching will indicate in their Help section which symbols are to be used for these. One search engine which does allow this is Exalead at <http://www.exalead.com/search/>

Non-obvious search terms

A non-obvious search term is a term from some area other than the main search subject which may lead to useful information. This is different from a **related term**, say using a particular country instead of its continent. A non-obvious search term comes from some sort of parallel area which is at first sight not clear.

For example, when looking for information about a particular disease, the name of a **researcher** in a similar field would be a non-obvious search term. It is likely that you would have to be guided by the enquirer about the appropriateness of non-obvious search terms because background knowledge of the topic would be needed in order to think of them.

Another means of finding non-obvious search terms is to browse in directories and portals and see what terms appear in associated sites.

You might like to ask your experienced colleagues to give examples of non-obvious search terms which they have used in the past.

13.2.3 Grammar of the Internet

The official name for what we commonly refer to as a website address is URL. **URL** stands for **Uniform Resource Locator**. Certain conventions apply to the construction of URLs which can give pointers on their usefulness. (This is also relevant to the validation of website results – see Outcome 4). Alan November has called this the Grammar of the Internet. (see <http://novemberlearning.com/educational-resources-for-educators/information-literacy-resources/>)

http stands for **Hyper Text Transfer Protocol**. This simply means your browser is looking for a Hyper Text document. Hyper Text is the basic coding used to construct web pages

www , as we all know, stands for World Wide Web.

The interesting parts are after http and www. The next part is called the **domain name**. So for instance **amazon.co.uk**

The first part of the domain name may yield useful clues. Is it a well-known name? If you come up with a page on the site <http://www.bbc.co.uk/history/> it has the authority of being on the BBC website. Is it a ‘personal’ site giving the opinion of only one person? The name of the person may be explicit in the domain name e.g. <http://www.jamieoliver.com/>

BUT be terribly careful here. An individual may set up a website to promote their own ideas and then a rival may set up a website with an equally convincing domain name. Remember anyone can set up a domain name of their choice and load any sort of rubbish onto the website.

Using WHOIS

It is often possible to find the owner/publisher of a website by doing a WHOIS search on the domain name. An easy route to this can be found as a facility on many website providers sites e.g.: http://www.networksolutions.com/en_US/whois/index.jhtml

You can enter the US domain name e.g.: **un.org** will yield the United Nations Organisation. Any site with a similar name attempting to fool users into thinking it is the UNO can be checked out in this way.

The UK site for WHOIS searches is: <http://www.nominet.org.uk/uk-domain-names/about-domain-names/domain-lookup-whois/whois-tool>

or go to www.nominet.org



ACTIVITY 2.2

Use WHOIS to decide which of the following is the official site of Glasgow Celtic football club.

- <http://www.celticfc.co.uk>
- <http://www.celtic-mad.co.uk/>

URL extensions

The final parts of the URL (separated by dots) are called **extensions**. A well-known example, say for Amazon (www.amazon.co.uk) is **.uk** which indicates that the website has been registered as of UK nationality. All domain names carry a national identifier as the last extension, except for those registered as being of USA nationality.

Taking Amazon as an example:

- www.amazon.com No national identifier signifies the United States
- www.amazon.co.uk .uk signifies the United Kingdom
- www.amazon.de .de signifies Germany
- www.amazon.fr .fr signifies France
- www.amazon.co.jp .jp signifies Japan



ACTIVITY 2.3

There are many websites which list these geographical extensions. One of these is <http://www.iana.org/cctld/cctld-whois.htm> Use this or any other appropriate site to find the geographic extensions for the following countries: Indonesia, India, Netherlands, Latvia, South Africa

Let us look further into www.amazon.co.uk The extension between the company name and the geographical extension describes the type of organisation involved. “co” is for UK commercial companies.

Each country has its own method for the domain name extensions. Most of the sites you will be dealing with will be UK or USA based, so let us look at the most common extensions for these countries.

United Kingdom extensions

.gov.uk is a national or local government site e.g. www.opsi.gov.uk the Office of Public Sector Information

.co.uk is a company site e.g. <http://www.slc.co.uk/> the student loans company

.ac.uk is an academic site e.g. <http://www.soton.ac.uk/> the University of Southampton

.org.uk is an organisation, often a charity e.g. <http://www.nationaltrust.org.uk/> the National Trust

.ltd.uk is a registered company e.g. <http://www.evans.ltd.uk/> the women's fashion outlet

There will be other domain extensions produced in the future. A recent introduction is **.me.uk** which is presumably meant for individuals.

However you must note that only some of these extensions can be relied upon. Only **.gov**, **.ac** and **.ltd** are strictly controlled. Anyone can set up a website with a **.co** or **.org** extension. In summary, you can use the domain name extensions as good CLUES (which are watertight for **.ac.uk** and **.gov.uk**) but be very careful.

United States extensions

Remember sites registered in the US have no geographical extensions.

.edu is an educational institution e.g.: [http://www.wisc.edu/](http://www.wisc.edu) Wisconsin university

.com is any company e.g.: www.amazon.com Amazon the Internet company

.org is an organisation (perhaps non-profit) e.g.: [http://www.openoffice.org/](http://www.openoffice.org) the organisation developing Open Office, the free office software suite.

.gov is a Government agency e.g.: [http://www.irs.gov/](http://www.irs.gov) Internal Revenue Service

.mil is a military institution e.g.: [http://www.navy.mil/](http://www.navy.mil) the US Navy

.net is used by network providers e.g.: [http://www.discountasp.net/](http://www.discountasp.net) an Internet hosting company

There are several others and some in the pipeline such as **.info** and **.biz** which will be used for commercial purposes.

Not all countries use these descriptive extensions. Germany and France, for example, only have the country extension. Thus we saw:

www.amazon.de for Germany and www.amazon.fr for France.

Another point to remember is that there is no requirement to register your site under its country of origin. Some British organisations use the US extensions of **.com** or **.org**:

www.debenhams.com/ - the well-known retailer

www.rsc.org/ - the Royal Society of Chemistry

are just two examples.

13.2.4 Search engine operation

There are essentially three stages involved in search engine operation.

- 1. Before you come to type in the search terms, there has to have been an enormous **gathering of data** about websites carried out by the search engine company.
- 2. The search engine uses your **search terms** to select candidate sites for the results.
- 3. The search engine returns the **results** ranked in some order.

The Internet is continually being scanned by software set up by the search engine company. This software called a spider or web bot looks for websites and key words to associate with them. The key words can either be **metadata** (descriptive keywords supplied by the site designer) or words in the text. The result is an enormous data bank of website addresses and their corresponding key words.

Search terms

When the user enters the chosen search terms, the search engine uses complex and proprietary methods to select resulting websites which should satisfy the search - basically the engine is trying to match your search terms against its keywords.

Each search engine has its own ‘secret’ methods, giving weight to particular words, including extensions to search terms such as plurals and so on. These algorithms may change with time and so different results for the same search terms may be obtained if the search is repeated at a later date.

How ranking works

Finally before presentation of the resulting websites, ranking occurs. Ranking is the process by which a search engine **orders the results** of a search. You would hope that ranking presents the websites most likely to have the most useful information first.

However you should be aware that in some cases, commercial sites can **buy** a place near the top of a list of websites in a search engine’s results. The implications of this are that the “best” sites do not necessarily appear at the top of the list. Also the results may appear in a different order at a different date due to ranking changes



ACTIVITY 2.4

A useful exercise is to look at the information pages of search engines to understand how they work. There is usually a section on how to notify the search engine about your website which will have interesting clues as to how the search engine treats new websites.

For each of:

- Google <http://www.google.co.uk/>
- Teoma <http://www.teoma.com/>
- Yahoo <http://www.yahoo.com/>

look for the “about” pages and find out how the engine works and how you submit a website to it.

It is important to remember that a search carried out by a particular search engine will return only a sub-set of all the possible results. This is because, due to practical constraints, the engine cannot index all the pages available in the web. An issue here is also how quickly the engine reacts to new or altered web pages. Thus it is always worth using several different search engines for any particular reference enquiry. Of course, there are sites returned in a search, which when clicked upon do not appear at all because the website has been rearranged or removed since the last indexing.

13.2.5 Ownership of the web

The questions ‘Who owns the Web?’ or ‘Who owns the Internet?’ come up from time to time. The implications of the answers are crucial to a good understanding of the nature of information on the Web.

First, let’s get the nomenclature correct. The Internet is the physical network over which information can flow. The World Wide Web (WWW) is a collection of sites where we can access information via the Internet.

So the question is now in two parts. Who owns the Internet? (i.e.: the physical network) and Who owns the Web? (i.e.: the collection of information we can access)?

Who owns the Internet?

The Internet is an enormous network which has spread throughout the world. One could say that it is owned by many, many organisations but that is not quite correct. It would be more accurate to say that many, many organisations own their particular part of it.

Consider how the Internet evolved. There were a number of scientific **research organisations** each with a network of computers and terminals. It was agreed to connect these together. Each organisation owned its own network. Gradually more and more commercial and organisation networks were created and joined together. The idea can be likened to the road network on the European Continent. Each country builds and pays for its own roads but it is possible to drive between any two points on the continent because the road network of each country is connected to the next country.

Luckily it is worthwhile for each part of the Internet to pay its own way to get the benefit of being connected to the whole network.

13.2.6 Who owns the Web

The other part of the question, who owns the websites, is similarly answered. Each website is owned and financed by an **organisation or person**. They alone have the rights to place their own information on the website.

So Governments will want to have websites to put up information for their citizens to be able to access. Commercial organisations will want to put up websites with information about their products to encourage sales. Other information providers will similarly create sites to distribute knowledge. Then there are millions of websites which are paid for and run by individuals who want to present information about their hobbies, favourite pop stars, family history etc.

So there is no one person or body responsible for what exists on the web. It is really quite difficult then to enforce laws proscribing offensive matter because there is no overall control and the offensive site can be situated anywhere in the World.

Tim Berners-Lee was the originator of the web and he saw it as a cooperative space for the sharing of information among researchers. He was working at CERN. It still can perform that purpose but the main driving force is now by **commercial interests**. On-line shopping is a very valuable sector nowadays and in the future there will be more and more commercial uses.

However you should be aware of the very different forces influencing what is seen in the search results. There are individuals, organisations and companies attempting to present their own version of the truth, often in an even-handed way, but occasionally in an insidious and very dangerous manner.

You must hone your validation techniques so that you can recommend websites which really are what they purport. The concepts of the ‘grammar of the internet’ can be put into practice here. Note that there are some truly shocking websites which lurk under the most inoffensive names. We are not going to supply any examples of these!

13.2.7 Dark internet and the invisible web

Search engines have become the main means of accessing information on the Internet. In the early days directories were used but these have now relinquished first place to the search engines. This is due to the enormous number of websites. Their number has grown exponentially and Google tells us that today there are over eight billion of them. There is no way that all these sites could be viewed by a human reviewer and placed in a directory. Our ability to find information on the Internet is now very much dependent on the qualities of the chosen search engine.

This does mean is that, if there are websites which contain information which cannot properly be accessed by the search engine spider, then we will never see it listed in the results. Indeed there are areas of the web which are never found at all by the searching spiders. A current problem is with search engines being unable to index **databases** and other websites which generate **dynamic content**. In other words, the content is not set out on the pages of the website but is generated each time in response to a user accessing the site via a

browser. Websites with some content not in HTML also cause difficulties. Examples are proprietary text formats or multimedia. PDF files have also been problematic.

If the search engines are not able to find the information then the only hope of finding its existence is by using a Directory. There are specialised portals to ‘invisible’ websites. One example is www.invisible-web.net which includes a directory of some of the best resources the Invisible Web has to offer.

You can read more about the Invisible Web here:

<http://oedb.org/ilibrarian/invisible-web/>

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/InvisibleWeb.html>

13.3 Create and implement a complex search strategy

13.3.1 Designing a complex search strategy

In Outcome 2 we looked at the theory of search logic – Boolean logic, wildcards, non-obvious search terms, grammar of the Internet, search engine operation and syntax, ranking, ownership of the web, the Dark Internet and invisible web. In Outcome 3 we consider how to apply all of this knowledge in order to design the best strategy for any inquiry. If you are not confident of your knowledge and understanding of the Outcome 2 topics, you will find it beneficial to revise that section before proceeding further with Outcome 3. You can return to the ICTL home page by clicking on the ICTL logo at the top left of the page and navigate to Outcome 2 from there.

Complex searches fall into two broad categories:

- 1. You may want to locate a **single piece** of specific information.
- 2. You may be asked by the enquirer to retrieve **everything you can** on the topic.

Locating a piece of specific information

What makes the search complex is that this information is not easy to find. For this type of search, you are likely to use one or more search engines. The skill lies in **choosing your search terms** and combining these into a search statement which will yield the required results.

Alternatively, you may know of an **authoritative site** on which this information will definitely be found. In this case, you will use the URL of the site and then carry out a search within that site for the required information. You should bookmark sites which you find especially useful. You can arrange these in your “Favourites” in topic related folders.

Retrieving everything on a topic

You may be asked by the enquirer to retrieve everything you can on the topic. In many cases, to carry out this instruction to the letter would mean presenting the enquirer with an **overwhelming** mass of material.

The skill lies in designing your search so that it results in a number of the most useful and representative sites, which present sufficient, but not too much, information in the format and style best suited to your enquirer.

For this type of search, in addition to search engines, you may need to use **directories, portals and databases**. With practice you will learn which to use first in specific types of enquiries.

Useful Search Techniques

The key to efficient searching is to construct an appropriate search statement by choosing and combining search terms. You will develop your skills in this with practice. Here are some tips from experienced Internet searchers.

1. Enter what you consider to be the most important search terms first. For example, **rover cars** rather than **cars rover**



ACTIVITY 3.1

Enter **rover cars** and **cars rover** into a search engine and compare the first 20 sites listed. You will find the results differ, although some sites appear in the top 20 listed in both searches. **rover cars** is more likely to lead to sites which deal solely with Rovers.

2. Enter phrases in quotes (or the equivalent syntax as specific by the search engine). Quotes instigate a search for the exact phrase e.g.: “**internet search techniques**” will search only for these three words next to each other and in this order. Without quotes, your search will also look for all three words but they could be anywhere in the document e.g.: **internet search techniques** could lead to sites discussing police **search techniques** for suspected **internet** crime.
3. If you are specifically seeking UK information, either ask to search UK sites only (if the search engine permits this) or add **uk** as a search term
4. Do not limit yourself to what we, as library staff, think of as indexing terms. Searching the Internet is different from consulting a printed index. So enter as search terms words that you would expect to find in the text. For example, in a search on teenage health problems, you might use search terms such as **bulimia**, **anorexia**, or **eating disorder**.

More useful search techniques

5. Look for distinctive, specific words or phrases which apply to your search topic. This is the best way of narrowing the search to relevant sites. **agoraphobia**, **English madrigals** and **peregrine falcon** are examples.
6. Remember synonyms and variant spellings. As much of the Internet content originates from the United States, it is particularly important to remember Americanisms e.g.: **trunk** instead of **boot** of a car; **checking account** instead of **current account**.
7. When searching on names of individuals or organisations, put these in quotes so that they are a phrase – “**Melvyn Bragg**”; “**Royal Society for the Prevention of Cruelty to Animals**”
8. When searching for information on an organisation, especially commercial companies, using the organisation’s name as a search term often does not lead to the organisation’s own web-site but to other sites in which the company is mentioned. (This is a result of the ranking methods used by search engines.) You may be more successful by using the organisation’s **postcode** and/or **telephone number** as search terms.
9. Use **nouns** rather than verbs as search terms, wherever possible. The reason underlying this is that nouns are frequently more specific than verbs.
10. If you are aware that one of your search terms is ambiguous, add additional terms which define the area in which you are interested. You will find that “**michael jackson**” “**wine critic**” **uk** leads to sites which are less likely to have a connection with the well-known pop singer.

13.3.2 Reviewing search terms in the light of results – broader/narrower/related terms

It is important to keep reviewing your search strategy and, in particular your search statement, as the search is underway. Ask yourself: Am I finding too much or too little information?

- Is the search generating a number of sites which are unconnected, or only loosely related, to the topic?
- Is there a slant to the topic which my search does not appear to be including?

In order to refine your search, you must be able to use terms which are broader or narrower than or related to your original search term. The words broader, narrower and related are self-explanatory. A good example which clearly illustrates the concept is:

initial search term - **Great Britain**

broader term - **United Kingdom** (The United Kingdom includes Great Britain)

narrower terms – **England**, **Scotland**, **Wales** (Great Britain includes these three nations)

related term - **Northern Ireland** (Northern Ireland is related to Great Britain in that GB and NI make up the United Kingdom)

QUESTION TextEntry1: Search term terriers

At each stage you should review the search statement, considering if it is appropriate to change the search terms.

Changing search terms

Where the key terms selected initially are yielding too much information, you should move to the use of narrower terms. A knowledgeable client might be able to advise you here.

Where the key terms selected initially are not yielding sufficient information, you should move to the use of broader or related terms.

Using a directory may help you identify broader, narrower and related terms within its structure.



ACTIVITY 3.2

Enter aeroplanes into the search box on Surf wax. When the next screen appears which summarises the search results, click on **Focus** and this will show you a selection of Similar, Narrower and Broader terms for **aeroplanes**.

13.3.3 Collection and presentation of results

The results of your search should be presented in a structured way which facilitates understanding by the client.

This may require you to extract or summarise information from one or more sites. If you do this, it is important for the client to be informed of the source(s) of the information found so that the client may explore the information further if they wish.

The result of the search might be a **bibliography** of web references or references to information sources in print, audio or video formats. You must quote any such references using a recognised format, for example, as in ISO 690. ISO 690-2 specifies the elements to be included in bibliographic references to electronic documents. It sets out a prescribed order for the elements of the reference and establishes conventions for the transcription and presentation of information derived from the source electronic document.

Here is an example of an electronic citation.

Monibot, George (2014) "How we ended up paying farmers to flood our homes".

Accessed via <http://www.theguardian.com/commentisfree/2014/feb/17/farmers-uk-flood-maize-soil-protection> (19 February 2014).

T

Before proceeding, state what you think the elements in this citation mean:

Monibot

George

2014

How we ended up paying farmers to flood our homes

<http://www.theguardian.com>

19 February 2014

Electronic citations

The elements of the citation are as follows:

Monibot - Author's surname

George - Author's forename

2014 - Date of publication of item

How we ended up paying farmers to flood our homes - Title of item

<http://www.theguardian.com> - URL for website on which item was found.

19 February 2014 - Date this site was accessed

Note that because web pages change constantly and can disappear it is important to give the date on which the site was accessed.

Presenting information to the client

You should devise a **logical structure** for presenting the information to the client. The most commonly used structures are based on these arrangements:

- Alphabetical
- Chronological
- Geographical (grouped by country, region or town)
- Topical (grouped by sub-topics)
- Categories (e.g.: type of organisation – public, private, voluntary)
- Accepted hierarchies (e.g.: biological taxonomy)
- Sites presenting one point of view, followed by sites presenting the opposing arguments

QUESTION TextEntry1: Traffic Congestion Search

13.4 Evaluate websites located in a complex search

13.4.1 Evaluating websites

Information on the Internet presents greater **problems** regarding reliability than information found in reference books and other materials in public libraries which have undergone a rigorous selection process. So ALL information found on websites must be **critically evaluated**. The more complex the search, the more necessary it is to apply sophisticated evaluation techniques.



Before proceeding, make a list of criteria you might apply to assess the suitability of a website found as a result of carrying out a complex information search

Evaluation criteria

We have noted the following nine criteria:

- Authority
- Credibility
- Accuracy
- Bias
- Emphasis
- Currency
- Clarity of presentation
- Use of multimedia
- Ease of use for visually impaired clients

We shall now look at each of these in more detail.

Authority

Here you need to consider the **expertise and reputation** of the organisations or individuals connected with the website. When the information is explicitly attributed to an author, you can assess their reputation. Thus information supplied by an acknowledged expert in a field or found on the website of a well-known and respected organisation carries a lot of weight.

Of course a website may give no direct clues as to **authorship** and hence authority. In this case you can try to find out who owns the site. In Outcome 2 of this unit, we covered examining the URL of the website and carrying out a WHOIS search to find out this type of information.

In searching for information about horse breeds you might come across this site: <http://www.ansi.okstate.edu/breeds/horses/>

Remembering Outcome 2, what type of organisation does this URL suggest?

.edu tells us that this site belongs to an educational institution in the United States. In fact, the site is that of the Department of Animal Science of Oklahoma State University and therefore you can expect an amount of authority. Note that some colleges and universities allow their students to create home pages which are not authoritative in the least. You can usually spot this by the name of the student in the URL.

Tracing website ownership

If you were obtaining information about travelling in South Africa, you might come across this site <http://www.springbokatlas.co.za/>

From the two domain name extensions you can see that it should be a commercial site (.co) and it is registered as a South African site (.za). You need to access the **whois** for South Africa. You can do this by searching for it. You can find it here: <http://co.za/whois.shtml>



ACTIVITY 4.1

Carry out this whois search. You can see that <http://www.springbokatlas.co.za/> is registered by the travel company and at the same address as the travel site in Cape Town. That gives a bit of confidence that it is a real company and not a fraudulent 'front'.

Of course it is pretty rare that a respected organisation's website would not very explicitly feature its own name.

You may have to either omit the information found on a non-attributable website or give a strong **health warning** to the client regarding its usefulness.

Credibility

If the author or organisation is unknown to you, you have to check out their credibility. Regarding a named but unknown author:

- a) there may be a section on the **author's credentials**, giving qualifications etc. – you can check out these details.
- b) if no credentials are supplied you can simply carry out a search on the **authors' name**.

What would you look for in the search results?

You might be convinced by such things as:

- positive references to their names in other articles on respected sites

- biographical information showing that they have relevant qualifications or work experience



ACTIVITY 4.2

When carrying out a search on the history of nuclear physics, you have found a site which quotes extensively from the research of someone called **Norman Feather**. Carry out a search to determine who this person was and whether or not he was a respected scientist of his time.

A mark of credibility is in the **citing of sources** for the information. If the unknown author cites only her/his own sources then you have no clue.

Evaluating credibility

You can evaluate a site to some extent by looking for **references** to it on other reputable websites. You can check which sites link to or reference the website being validated simply by searching on its URL. Enter the URL into a search engine and it should return a list of websites where the URL is found.



ACTIVITY 4.3

Try this out by searching on www.qca.org.uk which is the URL for Qualifications and Curriculum Development Agency www.qcda.gov.uk. You will find links to many respectable curriculum related sites, including government departments.

We have now covered a **variety of methods** which can be used to establish the authority and/or credibility of websites. With experience you will know which method(s) are best in any instance. The next activity provides an opportunity to practice using different methods.



ACTIVITY 4.4

Check reliability of each of the following web pages for authority and credibility:

- <http://www.nasa.gov>
- http://blogs.sun.com/roller/page/dcb/?anchor=rocket_science_open_standards

- <http://www.apogeerockets.com/>
- <http://www.bbg.org/gar2/pestalerts/>
- http://www.rbgsyd.nsw.gov.au/plant_info/pests_diseases
- <http://www.care2.com/channels/solutions/outdoors/444>
- <http://webarchive.nationalarchives.gov.uk/20060711093022/http://www.met.police.uk/history/ripper.htm>

Accuracy

Verifying the accuracy on information in a complex search has particular problems for the information professional who cannot be a subject specialist for every search area. The accuracy of factual information can usually be assumed to apply to reputable sites but even then you need to cross check using more than one site wherever possible. You certainly cannot supply information from sites with dubious authority/credibility without a caveat.

You must of course use your **common sense**. You can detect obvious mistakes e.g. a road-based car is not going to travel at 2000 miles per hour although it might in exceptional circumstances reach 200 mph. With more specialised data, you may still be able to get a feel for the numbers and simple mistakes will stick out.

Bias

Here you are looking to see if only one side of an argument is given. Many websites by their very nature present information from only one viewpoint and are thus biased. It is worth examining the URL and whois information. A commercial site is not going to criticise its products negatively. If the site is a personal one, you may be looking at the one-sided views of a ‘crank’. If the site is sponsored by a dubious organisation, you may only be able to find this out by looking at the whois data. Of course even well known experts can be biased in their opinions.

While such information need not necessarily be excluded from the results presented to the client, you must **indicate any identified bias** and, if possible, provide information from another sources which present opposing points of view. This is particularly important when the client is seeking information on potentially contentious matters such as politics, religion, race or issues related to pressure groups.

One of the most obvious areas where bias is shown is **health information**. Some sites are simply promoting dubious or unproven therapies with a view to selling their own “medicinal” products. You must make doubly sure that any sites found as a result of a search on a medical topic are reputable.



ACTIVITY 4.5

As an exercise in looking for bias in websites, search for a pair of websites giving opposing points of view on the following topics:

- Cats make better pets than dogs
- HRT is the only way to go
- Why wind farms are bad
- Petrol is greener than diesel

Have a close look at the arguments. Note how convincing some of these one-sided views can be.

You may be lucky when searching for information in a contentious area in that your initial search results in several sites giving the different viewpoints. However, if not, you must be prepared to actively seek out websites giving alternative views.

Emphasis

This differs from bias in that it is the omission of information rather than deliberate over-emphasis of one point of view. For example, US sites may devote little space to British developments. Another pertinent example is that sites for UK government departments may include information only for England on devolved issues.

You should be aware that emphasis can be more difficult to detect than bias. A solution is to apply the technique of cross checking with other sites on the same topic.

Health topics are an excellent example of where emphasis can creep in because of the differing approaches to medicine in different countries.



ACTIVITY 4.6

Insert the search term “**chronic fatigue syndrome**” into a search engine. Note how the majority of sites which appear are from the United States. Examine the sort of information on these sites. How useful would it be to an enquirer from the UK?

Now repeat the search using “**chronic fatigue syndrome** uk”. Examine the sites listed. We are sure that you will find them more useful sources of information for a client in your library.

Currency

In using the Internet you often come across websites which are seriously **out of date**. In fact some of them are actually abandoned and will never be updated again. When you use websites in your information searching, you must make sure that the information is current. Of course with a reference book you can look at the publication date. However for websites it is not just so easy.

T

Before proceeding, jot down some points you could look for on a website to establish its currency.

Establishing currency

We can think of a few possible ways of establishing the currency of a website. Obviously they depend on finding date information. This can be explicit:

- You can check the “**Last revised**” date on a website. Remember though that this may only indicate the last time a change was made to a particular part of the website and that it does not imply that all the content was updated on that date.
- You can look to see how recent are the **publication dates** of the documents referred to on the site
- You can look out for **dates quoted** within text and make an estimate of currency

If there are no actual dates mentioned, you will need to look for implications of dates.

- You can look for **regulations or laws** mentioned in the site and find their dates of introduction.
- You can look for the names of **institutions** or Government departments. These do change name and can be used to give a date range.
- You can look for the names of **personalities** involved in the topic which can show currency.
- Finally you can simply look for reference to **recent news items** which will date the site’s information.

A

ACTIVITY 4.7

Look at the following websites which all provide dynamic information and note the evidence which indicates that each has been recently updated.

- <http://www.bankofengland.co.uk>
- <http://mascotsuk.com/>
- <http://www.thisismoney.co.uk/>
- <http://easyjet.com/en/book/index.asp>
- <http://www.blenheimpalace.com/>

Currency indicators

We noted the following points:

Bank of England – lists recent working papers, conference reports etc.

Mascot – states on home page “Site last updated [date]”

This is Money – states on home page “latest news on [date]”

Easyjet – the earliest date for booking is today’s date

Blenheim Palace – the list of events is completely current.

T

Before proceeding, can you think of a flaw with the method we used to check the currency of the Blenheim Palace site?

Problems in establishing currency

In our Blenheim Palace example, we have established that their events calendar is current. This site also has a section on Properties to Rent. We cannot assume from the fact that the Events information is up-to-date that this section too has been updated (although clearly it would make good commercial sense for Blenheim Palace to make sure that this is done!)

Previous versions of a Website

The **wayback machine** at <http://www.archive.org> allows previous versions of websites to be browsed so that the history of a site may be viewed. This can allow you to get a feeling for how it has developed. It also allows or will allow changes in thought or policy to be observed by looking at a website at different points in time. You should, however, be aware that this site is by no means comprehensive. It is possible for website publishers to opt not to be archived. Also there is a limit to the amount of storage for the past websites.

In a complex search, it is likely that the results of the reference enquiry will consist of a **list of websites**. This differs from a simpler search which might only consist of information which you extract from a website.

Since the client will have to browse the resulting sites, some further points have to be considered as to the suitability of the websites.

Clarity of presentation

You need to choose sites where the information is clearly presented.

T

Before proceeding, list the factors you would consider when assessing whether a site presents information clearly.

Presenting information clearly

You will want to make sure that the following points are satisfied:

- Is it easy to **glean specific information** from the site?
- Is the site easy to **navigate** around?
- Does the site **avoid gimmicks** such as unnecessary and obscuring graphics?

Unless you are in the position that very few websites provide the required information, you can select the best, which satisfy the above points.



ACTIVITY 4.8

Look at <http://www.eca.ac.uk/> It is difficult to find information on the site because of its emphasis on visual gimmicks and use of multiple drop-down menus. Unfortunately a client seeking information on this institution will have little choice but to persevere in using the site.

Use of multimedia

The appropriate use of **multimedia** can enhance understanding and indeed provide additional information. However, some sites include multimedia such as Flash introductions, which at best are annoying and at worst put off the client due to the delays caused. If the connection to the Internet is not fast broadband, then the delays can be intolerable.



ACTIVITY 4.9

Here is an example of a site from a firm offering web design services

<http://www.transcena.co.uk>

We think its Flash introduction is unnecessary and does not add anything to the information provided. See if you agree with us.

Some sites offer the option of a Flash and non-Flash version. Look at <http://web.archive.org/web/20050113090553/http://www.blackburn.ac.uk/> and compare the operation of both versions. Which do you prefer?

For some searches, information in multi-media format is useful or even essential. You can make this one of your selection criteria. Often just typing video as one of your search terms will lead to sites which have video clips (It can, of course, also lead to sites which are selling videos). We tried jfk, assassination, and video which led amongst others to

http://www.courttv.com/onair/shows/kennedy/vintage_video.html where video clips can be played.

If sound files or sound tracks of movie clips are used, these may require loudspeakers to be available or, more likely in libraries, headsets to be used. Clearly sites where essential information is presented audibly are not appropriate for the hearing impaired.

Ease of use for visually impaired clients

There are two main areas which should be considered for the visually impaired client.

It may be that a client can use text on the monitor screen if it is very clear and perhaps large size. Here it is necessary to check that the website text is not partly obscured by background graphics such as a **watermark effect**. Other considerations are whether the text size can be increased by the user and if there is a text only version of the website.

The colour of the text and the background can also influence visibility. It is generally accepted that bright orange, yellow and red backgrounds make text difficult to read. <http://web.archive.org/web/20040710220451/http://www.dundee.ac.uk/djcad/courses/details.php?s=3> is an example.

Another practice to be avoided is white or pastel coloured text on a dark background. In a previous version <http://web.archive.org/web/20040101101704/http://battle1066.com/> the banner headline above the coat of arms in this site is difficult for even those with perfect vision. You can compare this with the latest version at <http://www.battle1066.com/> <http://www.abelard.org/technology/net-searching.php> Much of the text here is almost illegible.

At the level where the client is unable to read text from a monitor screen a **text to speech** accessory must be used. For this to be a successful experience, the website must be clearly laid out. Also it is important that all graphics have text descriptions. This is vital when it comes to the use of graphics in navigation through the website.

There are **guidelines for accessibility** and although you cannot be an expert in this area, you will find useful information on the following websites:

Two sites covering all accessibility issues: <http://www.co.i.gov.uk> and <http://www.becta.org.uk/>

A commercial site explains its approach <http://www.santander.co.uk>

The RNIB site http://www.rnib.org.uk/xpedio/groups/public/documents/code/public_rnib008789.hcsp

Recent research by the **Museums, Libraries and Archives Council** tested websites in the museums, libraries and archives sector and found that only 3% of these met the accessibility criteria set for government websites. You can read more about this research at: <http://web.archive.org/web/20050503012040/http://www.egovmonitor.com/reports/rep11278.pdf>

13.5 Reviewing the Effectiveness of a Search Strategy

13.5.1 Estimating the effectiveness of a search strategy

The **client's requirements** should have been clearly specified during the reference interview. The first stage in evaluation is to revisit that initial interview and consider if you did indeed fully explore with the client all the aspects of the query.



ACTIVITY 5.1

Think of any complex information searches which you have recently carried out. Look back to your initial reference interviews with the clients. Could these have been improved in any way? Note down what you could do better next time.

Next you must **review the results of the search** against the client's requirements and consider the success of the search in these terms.



Before proceeding, outline the criteria which you would use to judge whether your search strategy has been successful.

Criteria for success

We suggest that you would consider:

- Did the search produce results which were **relevant** to the client's needs?
- Did the search produce **comprehensive information**? i.e.: enough for the client's needs?
- And conversely, were the search results **sifted** in order to avoid deluging the client with information?
- Did the search produce information which was **reliable, up-to-date** and **covered all aspects** of the topic?
- Did you constantly have to **modify the search strategy** during the course of the search? And were these modifications a result of **deficiencies** in your original strategy?
- Did you meet the client's **deadlines** for producing the results?
- Did your search strategy mean that the search was carried out as **quickly and efficiently** as possible?

You should have no difficulty in applying the majority of the above criteria when considering the **effectiveness** of your search. The final criteria relating to time and speed may be less familiar to you.

Time spent searching

Time spent on a search is a **key evaluation criterion**. Given enough time an unskilled searcher could probably produce the required results, but an information professional should be able to produce the requested information much more quickly.

You should consider if your search strategy produced the results in the minimum possible time or whether any modifications of the search strategy would have yielded speedier results. Key to this is the choice of search engines, directories, search terms and logic.

Finally, do remember that **it may not be possible** in all cases to fully satisfy the client's requirements. (If this is the case, you will have explained the reasons for this to the client, e.g. information does not exist in the format specified, and proposed some alternatives if this is possible.)

Failing to fully satisfy the client's requirements is not in itself a criticism of your search strategy. If the information does not exist, the best search strategy you can devise will not uncover it. It does, however, give you a pointer for the next time you are asked to carry out a similar information search. If you have doubts as to the **existence** of the information requested, share this with the client right at the start so that they are not disappointed later.

13.5.2 Measuring the cost of a search

The cost of an information search arises from two components. The **cost of staff time** (yourself and colleagues) dedicated to the search and **direct costs**, i.e.: anything which has actually to be paid for.

An effective search strategy should mean that staff time input is **minimised**, thus keeping down the cost of the search. It can be easy to overlook the cost to the library service of staff time because public libraries do not normally charge for this. Commercial libraries often ask library and information staff to log the time spent on information searches and the enquirer's department is then billed for this.

We are not suggesting that you formally log time spent – merely that you keep aware of roughly how much time you are devoting to any information search and whether this is justified. If you find yourself devoting an **inordinate amount of time** to any search, ask yourself whether you should:

- modify your search strategy
- ask advice from a more experienced colleague
- ask a more experienced colleague to take over the search for you
- abandon the search at this point, explaining the reasons for this to the client.



Before proceeding, note down any direct costs which you think could be associated with an information search on the Internet?

Direct costs

Direct costs could include:

- Telecommunications charges
- Fees for subscription sites
- Charges to download particular documents
- “Pay-per-view” costs for commercial sites

Telecommunications charges will have been paid by your library service. They represent a **fixed overhead** and so you do not need to try to calculate them for any search.

Where a library service, has decided to subscribe to a particular information source, there will be good reasons for this. A knowledgeable person has decided that the subscription site provides better information than is available on free sites. Indeed the subscription service may provide the only information available. You should therefore familiarise yourself with the **content of subscription sites** and their **charging structures**.

Downloading and **pay-per-view** charges can mount up. Before using such information, always consider if there is an appropriate alternative source which is free of charge. An interesting article on the development of “pay for content” Internet provision is found at <http://web.archive.org/web/20040206000441/http://www.demonatthus.net/news/n-a030407a.html>

Another cost which can be considerable relates to **printing** and/or copying the search results. This can be minimised if you supply the results to the client in electronic format wherever possible.

13.6 Use ICT to set up current awareness and alerting services

13.6.1 Determining current awareness requirements of clients

You should begin by establishing an **information profile** for the client. This will provide information about what information the client needs and the quantity, level and format of the required information. It will also specify any constraints, such as deadlines for completion, currency of information and language and note any special needs that the client might have:

Example Information Profile

The following information profile might suit a client who wants to be kept up to date on happenings in the Scottish Parliament:

Client name: Joseph Grant

Email address: jgrant@btinternet.com

Age: 35

Education: Completed six years secondary school

Information Required: Regular updates re Scottish Parliament

Quantity: Brief summary with links to full stories

Level: Literate adult

Format: Daily digest

Deadlines: Wants to start ASAP

Currency: Updated daily

Language: English

Special Needs: None

You can find an example of online profile form at:

<http://web.archive.org/web/20060705204606/http://sciweb.lib.umn.edu/general/profile.phtml>

Establishing an information profile

Establishing an information profile uses essentially the same skills and techniques as the first part of this unit, i.e.:

- Reference interview techniques
- Eliciting information and advice from clients
- Determining the nature of detailed information to be provided – quantity, level, format
- Constraints – deadlines for completion, currency of information and language
- Special needs of the client

If you want to review these topics, you can click the ICTL logo at the top left of the page to return to the Unit 6 home page and navigate from there to Outcome 1 of this unit.

In addition to establishing the nature of information required, what else would you need to agree with the client in order to provide a satisfactory current awareness service?

It is also essential that you should agree the update frequency with the client. e.g.: weekly, monthly, whenever a change occurs, on-demand etc.

Costs

You should take into account the **costs** (in staff time or subscriptions to commercial services) of providing updates and should be realistic about their frequency. Remember that your time costs money and it is unrealistic to spend disproportionate amounts of it in meeting the needs of a small number of clients.

Also, commercial services can be **expensive to use** : if you do not already subscribe to a service, it may be uneconomical to do so to meet the needs of a small number of clients. Some commercial services also incur a usage charge, in which case you must ensure that this is not excessive.

13.6.2 News services

A news service is one which provides regular updates on topics commonly regarded as news, i.e.: those topics covered in newspapers and television or radio news broadcasts, such as current events, politics, sport etc.

News is a distinct category for current awareness because of the need for **immediate notification** of breaking events as well as **regular summaries**. There are a wide variety of news sites to choose from.

Three **methods of delivery** may be distinguished:

- **daily digest** via e-mail. This gives the subscriber a brief daily summary of newsworthy events, usually with links to more detailed stories.
- **breaking news events** by e-mail. This lets you receive instant details of new stories, more or less as they break
- **online news ticker** permanently visible on the computer monitor. This scrolls news headlines continuously across the bottom of the screen and is updated with new stories as they happen. It often provides hotlinks to more detailed coverage.

All three have their own advantages and disadvantages. The daily digest is non-intrusive and allows you to follow up such stories as you choose, but you only receive updates once a day. The breaking events coverage lets you know as soon as something happens, but you have to check your email to see it. The online news ticker lets you know about new stories instantly, but some people find it an annoyance having it on the screen all the time.

Some e-mail delivery services allow the use of filters, which give an element of choice of news topics delivered. If you are setting up a news delivery service for a client, it is vital that you use this filtering in order to tailor the service to the client's needs.

Daily digests

You can obtain a daily digest from the following sources:

- **BBC:** <http://newsvote.bbc.co.uk/email/news>
- **Google:** <http://www.google.com/alerts?hl=en>
- **The Scotsman:** <http://auth.jpress.co.uk/login.aspx?ReturnURL=http%3a%2f%2fwww.scotsman.com%2ftemplate%2fEmailPreferences.aspx&SiteRef=SCOT>



ACTIVITY 6.1

Choose one of the above services and sign up to receive a news digest. Remember, you can always cancel it later if you don't like it.

Breaking news

You can obtain breaking news alerts from the following sources:

- **BBC:** <http://news.bbc.co.uk/1/hi/help/3533099.stm>
- **Google:** <http://www.google.com/alerts?hl=en>



ACTIVITY 6.2

Choose one of the above services and sign up to receive breaking news stories. Remember, you can always cancel it later if you don't like it.

Online tickers

Online tickers are available from the following sources:

- **Reuters:** <http://www.microsite.reuters.co.uk/ticker/uk/godownload.htm?src=marketing>
- **BBC:** Currently being upgraded, but check at <http://news.bbc.co.uk>

You can find a list of news tickers at: <http://www.journalismnet.com/choose/newstickers.htm>

It's unlikely that you could install these on library machines due to security restrictions, but you might have to explain to clients how to put tickers on their own PCs.



ACTIVITY 6.3

Go to <http://www.journalismnet.com/choose/newstickers.htm> and look at the tickers. Which ones look as if they might be useful to you and why?

News aggregators

One relatively recent development is the use of **news aggregators**, using an XML format such as RSS, to receive relevant news headlines.

XML stands for **eXtensible Markup Language** and is a standard format for computer-readable documents which makes it straightforward to process them automatically.

RSS stands for **Really Simple Syndication**. It's a method of describing news or other Web content that is available for syndicating (i.e.: feeding or distributing) from an online publisher to Web users. The term "syndication" derives from the newspaper industry practice of sharing content between different papers. A column or a cartoon (such as Peanuts) which appears in numerous different papers is described as "syndicated".

There is a useful introductory article at:

<http://www-106.ibm.com/developerworks/library/w-rss.html?dwzone=web>

and another at:

<http://news.bbc.co.uk/1/hi/help/3223484.stm>

A **news aggregator** is a software application that collects syndicated content from a variety of sources and displays it as a single web page. A website may incorporate aggregator features by republishing syndicated content on one or more of its pages. Aggregator features also can be added to other client software, such as Web browsers, e-mail clients, weblog creation programs, or media player programs, to allow these programs to display syndicated content.

You can get more information from: http://en.wikipedia.org/wiki/News_aggregator

News providers

Another way to make the topic choice more focused is by the choice of provider. The FT ticker would be a good choice for stock market data. If you carry out a simple search on Google, an array of sites providing specialised news will be found, e.g.: www.bunkerworld.com offers both an e-mail delivery service and a news ticker devoted to the happenings in the world of bunker fuel.



ACTIVITY 6.4

Use Google to find specialised news providers on the following topics:

- The Middle East
 - Computing
- Take a note of the two most interesting ones in each category.

The ones we found included the following:

The Middle East

- Globalvision News Network: <http://www.gvnews.net/html/index.shtml>
- AME Info: <http://www.ameinfo.com/45876.html>
- Gulf in the Media: <http://www.gulfinthemedia.com>

Computing

- SearchMobileComputing: <http://searchmobilecomputing.techtarget.com>

- News.Com <http://archive.is/20121208135346/http://news.com.com/>
- Network Computing <http://www.networkcomputing.com/netnews/>

13.6.3 Website updating services

Some commercial websites offer an alerting service detailing new products. Of particular interest to library professionals are the alerting services of journal and book publishers. For journals, it is possible to get the table of contents and sometimes abstracts of the articles. One example is the content alerting feature in <http://www3.oup.co.uk/jnls/> for Oxford University Press Journals.



ACTIVITY 6.5

Go to <http://www3.oup.co.uk/jnls/> and sign up for alerts for one or more of the OUP journals.

For book publisher alerting services it is possible to include filters to receive information on particular types of books. An example is the Mailing List feature on www.heinemann.com Booksellers also offer alerting services, with www.amazon.co.uk being an obvious example.



ACTIVITY 6.6

Go to www.amazon.co.uk and subscribe to their alerting service by clicking on the New for You link in the left-hand column.

You can find links to the website alerting services of many major publishers and vendors at: <http://www.lib.cuhk.edu.hk/information/publisher.htm>



ACTIVITY 6.7

Go to <http://www.lib.cuhk.edu.hk/information/publisher.htm> and sign up for one or two alerting services which look useful to you.

Alerting services are not confined to books and journals. For example, Stay Smart Online (<http://www.ssoalertservice.net.au/view/80956e10461f4446acbcab5cae348a0c>) is a Australian Government service, designed to provide small businesses with accurate, plain

English advice to help protect computers, mobile phones and other devices from malicious attack.

Monitoring websites

The contents of websites change and often do so at unpredictable intervals. If you want to be notified when the contents of a website change, without having to connect to it frequently to check, you can set up an **alert** to notify you of any changes. If an alert can be set up it can solve two problems. Firstly if there is a substantial change to an often-recommended site, you can check up to see if must be re-evaluated for recommendation. Secondly, if data contained in a site is updated at say annual intervals, it is useful to know when the new data becomes available. This is similar to knowing that a new edition of a reference work has been published and needs to be purchased.

Some websites offer to notify subscribers automatically if changes are made, but there are a number of tools available which allow you to monitor changes on any website, e.g.:

- Website Watcher <http://www.aignes.com/features.htm>
- Check and Get: <http://activeurls.com/en/>



ACTIVITY 6.8

Download an evaluation version of the software from one of the sites given above and use this to set up alerts for two or three websites you visit frequently.

13.6.4 Creating a current awareness system for your own organisation

A **current awareness service** is a service or publication designed to alert scholars, researchers, readers, customers, or employees to recently published literature in their specialist field(s). Current awareness systems are usually available in special libraries serving companies, organizations, and institutions in which access to current information is essential. Such services can be tailored to fit the interest profile of a specific individual or group. Some online catalogues and bibliographic databases include a "preferred searches" option that allows the library user to archive search statements and re-execute them as needed. Current awareness services are sometimes referred to as **selective dissemination of information (SDI)**.

Internal **current awareness systems** have traditionally involved the physical circulation of print materials to clients. These have now been replaced by electronic versions. This includes identification of relevant materials which match the client's information profile. The materials might include internal documents in electronic or print format.

You should be able to identify relevant print or non-print materials from journals, reports etc. Where such are available only in print format, you should give a reference and a

brief description. You should be able to operate a system for e-mailing information to clients within the organisation at agreed intervals and set up web-sourced current awareness services for internal clients.

You can find lots of links relating to current awareness services for librarians at the following sites:

http://www.city.academic.gr/special/libproject/LIBRARY_SITE/information_services/LIBRARY_SERVICES/alerting_services.htm

<http://www.lboro.ac.uk/departments/dis/disresearch/ascas.html>

Although these are university library sites, much of the content is applicable to public libraries.

You can find a long list of available current awareness and alerting services at the following location:

http://www.tru.ca/library/guides/current_awareness/current_awareness_a-z.html



ACTIVITY 6.9

Draw up information profiles for one or two of your colleagues and set up current awareness services for them by using some of the resources mentioned in the sites listed above.

14 Educator

This page is designed for the use of students undertaking the **Level 8 PDA** (Advanced Diploma ICTL¹) in **Applications of ICT in Libraries** .

These qualifications were developed by the **Scottish Library and Information Council (SLIC)**² and are validated by the **Scottish Qualifications Authority (SQA)**³

Carrying Out the Educator Role is an optional unit in the Level 8 PDA programme.

Information regarding the **background to the courses , content and certification opportunities** can be obtained by following the **Level 7** (Diploma ICTL⁴) or the **Level 8** (Advanced Diploma ICTL⁵) links.

Further information can be obtained from angela.lees@sqa.org.uk

14.1 Establishing ICT training needs for individuals or groups

14.1.1 Training needs analysis

Before embarking on designing and delivering any training programme you must establish your precise objectives. This means determining:

- 1. the **existing** skills, knowledge and competences of each of the learners
- 2. the skills, knowledge and competences the learners **require** in order to operate effectively in their existing work role or to progress to a different work role
- 3. And, from 1 and 2, the **gap** in skills, knowledge and competence which the training is designed to address.

It will be the objective of your training that each participant learns enough to eliminate this gap.

This process is often called a **Training Needs Analysis (TNA)** or **Learning Needs Analysis (LNA)** . For Outcome 1 you must demonstrate that you can carry out a straightforward TNA for individuals and groups of learners.

The first step then is to make an **accurate estimate** of the learner's current competence.

1 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

2 <http://www.scottishlibraries.org/>

3 <http://www.sqa.org.uk>

4 <https://en.wikibooks.org/wiki/Diploma%20ICTL>

5 <https://en.wikibooks.org/wiki/Advanced%20Diploma%20ICTL>

T

Before proceeding, outline what may happen if you embark on delivering training without ascertaining the existing skills, knowledge and competence of your learners.

TNA problems

There are two equally damaging scenarios.

At one extreme you may have **overestimated** the learners' skills and knowledge. You therefore pitch your training at too high a level. If you are lucky, the learners will point this out to you and you may be able to think on your feet and do a quick redesign of the training.

However, if you find yourself having to devote a considerable amount of time to bringing the learners' skills and knowledge up to the point at which you thought you would be starting from, you will be unlikely to be able to achieve the final learning objectives in the original timescale.

If you have overestimated the skills of only one or two members of a learning group, it is quite likely that they will not draw your attention to this. Instead they will sit quietly, not wishing to appear foolish in front of their colleagues. In this situation they will learn little and will become demotivated and disinterested.

At the other extreme you may have **underestimated** the learners' skills and knowledge. You will then find yourself delivering training which covers areas which they already know – “teaching Granny to suck eggs”.

Your learners are likely to become quickly **disenchanted** and possibly aggressive. If this applies to only one or two in a learning group, these learners are likely to switch off and may distract other group members.

From these examples, you can see the importance of really knowing your learners before you start.

Estimating ICT Competence

Learners may have acquired differing **levels** of ICT competence through:

- **formal training** in the workplace
- **experience** in the workplace
- **off-the-job training** such as an ICT course at school or college
- **personal development** and experience outside work.

Where skills and knowledge come from non-workplace environments, it is important to make sure that they are transferable into a workplace setting. ICT skills and knowledge usually do transfer readily. Thus your TNA should relate to competences from both work and non-work environments.

The obvious place to start is with the learners themselves. However, people are, depending on their personality, often inclined to underplay or alternatively exaggerate their ICT competence and experience. So you will wish to **corroborate** the learner's estimates of their competence through hard evidence or the views of other people.

T

Before proceeding, think of who else, apart from the learners themselves, might be able to provide you with useful information on a learner's ICT competence.

Sources of information regarding ICT competence

You might usefully consult some or all of the learner's:

- **line manager** or immediate supervisor
- **colleagues**
- **previous tutors** or trainers from within and outside your own organisation
- **clients** in the library who will have received a service from the learner which is ICT related.

T

Before proceeding, note down as many techniques as you can which you might use to gather information on the learner's competence from the learner themselves or from any or all of the people listed above.

Information gathering techniques

You might use some or all of:

- direct observation of the learner using ICT in the workplace
- examination of work samples or work records belonging to the learner
- practical tests and assessments of the learner's use of ICT
- questionnaires or checklists covering key ICT competences
- the learner's staff appraisal reports
- interviews or focus groups with learner, manager, colleagues, tutors, clients

Direct Observation

This is one of the most reliable methods for you to gauge the learner's competence. You will see for yourself exactly what they can and cannot do. You can supplement this by **questioning** to extend to situations which occur rarely or would be emergencies. Use

questions like "What would you do if the system crashed at this point?" or "Can you think of an occasion when what you have just done would not be appropriate?"

There are a few **disadvantages** with direct observation. The learner may feel nervous and so under-perform. Alternatively, they may "play to the camera", although this is usually easily spotted. The main drawback is that observation must be done on a one-to-one basis. It is therefore time-consuming. Another difficulty can be that you have to arrange a time which is convenient to both you and the learner and when work conditions allow the learner to carry out the specified tasks.

Examination of Work Products

ICT tasks often produce **printed materials** or **electronic records** which are stored in the computer. These demonstrate clearly what a learner has been capable of.

Practical Tests and Assessments

You may be able to devise a short pre-training assessment which all learners will undertake. Make sure that this assesses only the knowledge and skills which are directly relevant to the proposed training (and, it goes without saying, to the work to which this training is related).

Devising assessment material is a skilled task. It is always advantageous to have a dummy run with a couple of volunteers who will give you unbiased feedback and point out any ambiguities or deficiencies in the assessment. You may be able to get assistance in devising assessment materials from your Training or HR Department.

Questionnaires or Checklists

Questionnaires or checklists can be completed by the learner themselves or by other people who can give an **informed opinion** as to the learner's competence. It is important not to make these too detailed. You should home in on the key competences only.

Here's an example of a checklist which might be used to establish a learner's competence in using applications under Microsoft Windows.

Please tick the box which best describes your ability to carry out each of the tasks below:

Task	I have done this often and am confident about my ability	I have done this quite a few times and I would probably be able to do this in most situations	I have done this occasionally and would need some reminders about how to do it again	I have never done this
Run an application from the desktop or by using the Start menu				
Create a new folder				
Open a document and use the Save and Save As options				
Save a document in different formats				
Print a document				
Cut, copy and paste within a document, between documents and between applications				

Staff Appraisal Reports

Staff appraisal documents are, of course, **confidential**. However, with the agreement of the member of staff concerned you may be shown relevant extracts relating to ICT skills.

Interviews or Focus Groups

These can take place with learners, managers, colleagues tutors or clients and may be one-to-one or group interviews. It is vital to obtain the consent of the learner before you invite opinions from others as to the learner's ICT competence. It is equally important to reassure others that the learner has agreed to your interview with them. In some cases the learner may be able to suggest appropriate interviewees who could provide valuable insight into their ICT competence.

In all cases it is essential to start the interview by explaining the reasons why you are exploring the learner's ICT competence. It is good practice to use a checklist to ensure that you get all the required information from each interviewee.

Areas of competence

You can use these techniques to profile the learner's **existing ICT** skills in the areas of:

- hardware
- operating system environment (e.g.: Windows)
- packages used (e.g.: Word)
- the library's own ICT management system
- the Internet

In Outcome 1 of Unit 3 we discussed in some detail the areas which you would want to explore under each of these headings. If you want to review this material, you can click the ICTL logo near the top left of the page to return to the Unit 7 home page and navigate to the relevant Outcome from there.

Learning objectives

The next stage is to determine your learning objectives, i.e.: the skills and knowledge which it is intended all learners should possess at the end of the training. These will usually be related to:

- improving the learners' **competence in their current job**
- preparing for planned **new ICT developments** which will impinge on the learners' current job
- upskilling so that the learners can move on to a different job which requires **increased ICT competence**.

To determine the required skills and knowledge, you can use the same or modifications of the methods for assessing existing ICT competence

T

Before proceeding, look at this list again:

- direct observation of learner using ICT in the workplace
- examination of work samples or work records belonging to the learner
- practical tests and assessments of the learner's use of ICT
- questionnaires or checklists covering key ICT competences
- the learner's staff appraisal reports· interviews with learner, manager, colleagues, tutors, clients

Remembering that this time you are focusing on the end product of the training, amend the list to show the methods you could employ.

Methods of gathering information

We think that this time you will lay more emphasis than previously on evidence from people other than the learner. Of course, it is still important to consult the learner in order to gain their views on the skills which they think they require. However, at this stage you are likely also to consider:

- **direct observation** of others using ICT in the workplace, e.g.: staff already employed in a post to which the learner may aspire
- **examination of work samples or work records** belonging to others, e.g.: a colleague in a similar job to the learner who demonstrates greater ICT competence
- **questionnaires or checklist s** covering key ICT competences, e.g.: completed by managerial or supervisory staff
- **interviews** with managers, supervisors and colleagues in similar posts or in promoted posts
- **literature** provided by suppliers of new/upgraded ICT equipment which it is intended to install in the library.

And finally having gathered all your evidence as to the existing skills and knowledge of your learners and the competence which are the end result of the training, you can design an appropriate training programme to upskill the learners to the required level.

T

Before proceeding, consider what approach you might adopt if your training needs analysis establishes that the ICT skills of your small group of learners differ considerably.

Dealing with differing skill levels

Your approach might be to design **individual learning programmes** for each learner which they can work through independently of their colleagues.

However, it is probably more cost-effective to bring the skills of all group members up to a common base level and then provide group training from that point on. You might, for instance, arrange for three of the group to work through some basic ICT learning packages in the library before you delivered some group sessions on simple Internet searching.

14.2 Selecting a delivery approach

14.2.1 Learning styles

We all learn in a variety of ways but each of us tends to have one learning style with which we feel most comfortable. Many educational theorists have written about learning styles and the implications of these for delivery of training. One well-accepted approach is that of **Honey and Mumford** who identified four main learning styles:

- activists
- reflectors
- theorists
- pragmatists

According to Honey and Mumford, different learning activities are associated with each of the four learning styles.

Activists

Activists prefer **new experiences, opportunities to tackle problems and difficult tasks**. They like challenges, generating new ideas, brain storming, leading others. Their philosophy is: "I'll try anything once".

They tend to act first and consider the consequences afterwards. They are gregarious and like learning in a group with other people, although they can tend to try to centre all such group activities on themselves.

Reflectors

Reflectors are thoughtful people who prefer to **collect all the facts** and data and **consider every aspect** of a situation before taking action.

They will listen to others' opinions and experiences and learn from these. They are likely to adopt a low profile in group discussions but enjoy observing other people in action.

Theorists

Theorists prefer a **clear structure, focus and purpose** and will want to know exactly what is expected of them. They like to have time to **think logically** about ideas and situations and try to fit these into a pattern.

They learn by thinking problems through in a step-by-step, logical way. They like to analyse and synthesise. They are uncomfortable with subjective judgements, lateral thinking and anything flippant. They are happy to learn alone without group support.

Pragmatists

Pragmatists learn best through **concrete activities** which let them try out ideas, theories and techniques. They like to have the opportunity to **practice** what they are learning with **feedback** from a knowledgeable mentor.

As they are essentially practical, down to earth people who like making practical decisions and solving problems, they tend to dislike long-winded and open-ended discussions.

Although each learner is likely to have one preferred learning style, everyone can use a **mixture of styles**, depending on the type of learning and the occasion.

QUESTION TextEntry1: Different Learning Implications

Other approaches to learning styles

The approach of **Honey and Mumford** is just one way of looking at different learning styles. If you wish to explore this further, you will find some good summaries of other approaches at: <http://www.learningandteaching.info/learning/experience.htm>

Another way of categorising learners is to measure their attributes in terms of:

- 1. Active vs reflective
- 2. Sensing vs intuitive
- 3. Visual vs verbal
- 4. Sequential vs global.

You can learn more about these learning styles and their implications for design and delivery of training at: <http://www.engr.ncsu.edu/learningstyles/ilsweb.html>

This also includes a **short online questionnaire** which you can be used to determine your own learning style.

That's the end of this section. You can review any topic by using the menu at the left-hand side of the screen, or move on to the next section: Delivery approaches ...

14.2.2 Delivery approaches

When we explored the four different learning styles, we realised that the trainer must chose **appropriate delivery methods** in order to accommodate the styles of the learners.

Another equally important dimension to consider is matching the delivery method to the nature and content of the learning.

T

Before proceeding, list the most common types of delivery method which you might be able to include in a programme of workplace training.

Delivery methods

Among the most common delivery methods are:

- “chalk and talk”
- demonstration
- group problem solving
- role playing and simulations
- practical activities, individually and in groups
- individualised learning, e.g. from a book or an e-learning package
- videos and other media.

“Chalk and Talk”

This phrase is often used to describe **traditional teaching**. The picture it conjures up is of the trainer in front of the group of learners, giving a talk on some topic. Nowadays, the “chalk” element is more likely to be a whiteboard, flipchart or a PowerPoint computerised presentation. This method is suitable where the trainer wishes to impart theoretical knowledge to the whole group of learners.

We absorb more information from **what we see** than from what we hear. So it makes sense always to include visuals, either on the board, chart or screen or through handouts or posters. The learners’ **attention span** will be limited when they are required only to listen to someone talking. Good practice is to introduce a variation by asking questions of the learners, encouraging the learners to ask questions of you or by interspersing your talk with group discussions.

Demonstration

The trainer will demonstrate **how to carry out a practical activity** to either a group of learners or to an individual. You might be able to incorporate demonstrations from other people – experienced colleagues or one of the group who is more skilled than the others.

When group demonstrations are involved, it is crucial that every group member can observe the demonstration clearly and has the opportunity to ask questions of the demonstrator.

Group Problem Solving

Team working is one of the most highly prized skills in the workforce of today. Any training which involves group problem solving has the multiple advantage of:

- improving the learners team working skills
- developing the particular competences related to the training topic
- enhancing the core problems solving skills of the learners.

Problem solving activities need to be carefully structured by the trainer. A useful approach is to encourage the learners to adopt a process of Plan–Do–Review. This ensures that they progress to the stage of evaluating their problem solving strategy and learning from it: not just designing and implementing a strategy for solving the problem.

Role Playing and Simulations

These offer the opportunity for participants to practice in a safe environment and to learn about situations which occur only rarely or which involve danger and emergency action.

However, role-playing and simulations should be used sensitively, remembering that many learners feel apprehensive in artificially constructed situations.

Practical Activities

Hands-on practical work has an important role to play in workplace learning. It offers the learners the opportunity to develop skills in a real situation, with the equipment they will actually use on the job. Do make sure that there is enough equipment.

In particular, it is unwise to double learners up on terminals to undertake computer-related tasks. This usually results in one (the more confident) learner carrying out all the tasks, while their partner passively watches.

Individualised Learning

You may have access to commercially produced learning packages (print or electronic) which are applicable to the training you wish to deliver. The alternative is to design your own – but be warned - this requires **considerable skill** and **time input** on the part of the trainer, if a polished and professional product is to result.

Videos and other media

It is common to use audio or video material in learning sessions. These provide the opportunity to engage the learner by introducing experiences from beyond the training room or the library service. And they can provide a welcome change from the trainer's voice!

T

Before proceeding, complete the chart below.

Which learning activity(s) would be most suitable for the training topics listed?

	New health and safety regulations and their implications for the workplace	Dealing with awkward clients	Operating the new e-catalogue	Catching up for two learners who missed the previous learning session
"chalk and talk"				
demonstration				
group problem solving				
role-playing/simulations				
practical activities				
individualised learning				
Videos and other media				

Choosing learning activities

It is possible to think of a scenario when you might use each of the activities for any of these topics. However, we think the most fruitful choice is likely to be.

	New health and safety regulations and their implications for the workplace	Dealing with awkward clients	Operating the new e-catalogue	Catching up for two learners who missed the previous learning session
"chalk and talk"	X		X	X
demonstration		X		
group problem solving	X			
role-playing/simulations		X		
practical activities			X	
individualised learning				X
Videos and other media		X		X

14.2.3 Motivating learners

Motivation is the key to all successful learning. You may have designed a wonderful training programme but if the learners are not motivated to learn, your efforts are doomed to failure.

T

Before proceeding, make a list of factors which can demotivate learners

Demotivating learners

We could demotivate you by giving a long list here! But instead here is a summary of what we think are the **main demotivators** for learners.

The training itself:

- The training is at too high or low a level.
- Learners have been compelled to attend the training without the reasons for their participation being adequately explained.
- The topic appears irrelevant to the learners.
- The trainer has not outlined clearly at the start of the training what the **specific learning objectives** are.
- The training is **delivered badly**.
- The **learning environment** is poor.

The learner:

- Learners have had previous **negative experiences** at school, college or of workplace training.
- Learners are **distracted** by problems unconnected with the learning.

Level of training

If the training is pitched at the **wrong level**, it will result in learners who are either **struggling to cope or bored**. Neither category of learner will be particularly motivated to learn. If you have carried out the training needs assessment properly, this should simply not occur.

Learners for whom the training would have been at too high a level should have received preparatory training to upskill them and extend their knowledge to the competence required.

Learners for whom the training would be at too low a level should either simply not attend or could be slotted in part way through the programme at the point at which the learning becomes relevant to them.

Other demotivating factors

We will group the next three points together as they are closely linked.

- Learners have been compelled to attend the training without the **reasons** for their participation being adequately explained.
- The topic appears **irrelevant** to the learners.
- The trainer has not outlined clearly at the start of the training what the **specific learning objectives** are.

We take it as read that the topic is relevant to the learners - otherwise there is no justification for you to deliver the training.

Reasons for attendance should be clearly explained to the learners in advance and links between the proposed training and their work demonstrated. It is especially important to outline the benefits to the learners themselves (as opposed to the library service) which will result from the training programme. You might be able to show, for instance, how learning to use a new computer program could cut down on boring, repetitive manual tasks. As the trainer you may either discuss these issues yourself with the learners in advance of the training or, alternatively, you should ensure that another person does so, most probably their line manager. In the later case you may find it helpful to construct a briefing sheet.

At the start of the training programme you will outline your specific learning objectives and how you intend to deliver the training to achieve these. At this point you should clarify what your expectations of the learners are and, conversely, what support the learners can expect from you.

Badly delivered training

We hope that when you have completed this unit, this will not be the case! However, let us list a few common pitfalls which you should try to avoid.

- Trying to pack **too much material** into a learning session
- Poorly produced **visuals**
- Irritating **mannerisms** on the part of the trainer, e.g.: jingling coins in pocket, fiddling with jewellery
- **Poor delivery** , e.g.: mumbling, speaking too quickly
- **Lack of variation** of learning activities
- **Poorly structured learning programme** , e.g.: no logical flow through content (See Outcome 3)
- Trainer does not have **sufficient knowledge** or skills in topic

Poor learning environment

We are using the term “learning environment” to encompass the **venue** , **the equipment** , the **resources** etc. You should make sure that any practical issues which might demotivate the learner are minimised.

Examples might be too high or too low temperatures in the training room, training sessions which start late or over-run, extraneous noise or distractions, technical problems with ICT equipment, interruptions from colleagues seeking information on day-to-day work. And do make sure that all mobile phones are switched off before the training commences.

Previous negative experiences

Obviously establishing a friendly, reassuring **relationship** with the learner is crucial here. It may also be helpful to expand on the differences between the current training programme and any previous negative experiences which the learner has had. You could emphasise for instance that your learners will be able to work at their own pace, can practice what they are learning in the workplace with support from more experienced colleagues, will not have to sit formal examinations or test etc.

One major motivator is for the learner to see that they have achieved something. Success breeds success. The implication of this for you as the trainer is that learning programmes must be broken down into small sections and the objective and sub-objectives for each section should be clearly explained to your learners. For instance, if the training relates to word processing, a sub-objective might be for the learner to become competent in left, right and full justification of text.

Distractions

If a learner is worried about **personal problems**, they will be unable to give their full attention to learning new things. This is possibly the most difficult demotivator for a trainer to tackle. After all, you can do little if one of your learners is experiencing financial difficulties, marital problems or is concerned about their health. All you can do in these circumstances is to reassure the learner that you are sympathetic to any difficulties which they have shared with you and that you will attempt to accommodate any special requests resulting from them.

You may be able to take some action about more practical problems though. An example would be if the training occurs at the venue which is not the learner's normal workplace, resulting in childcare problems because of long journeys by public transport. By allowing such a learner to leave ten minutes earlier, you might be able to resolve the situation.

If you wish to read more about the theory of motivation and its application to training, you will find a good summary at <http://www.learningandteaching.info/learning/motivation.htm>

14.3 Design of learning materials and programmes on ICT related topics

14.3.1 Defining learning objectives

You should define learning objectives in **specific terms**. Learning objectives usually involve a statement of:

- **the task or knowledge** involved, i.e.: what must the learner be able to do or know?
E.g.: save data in a spreadsheet
- **the condition**, i.e.: how will it be performed? E.g.: without reference to the Help facility
- **the standard**, i.e.: how well must it be performed? E.g.: correctly in 90% of cases

It is generally accepted that all learning objectives should be SMART (Specific, Measurable, Achievable, Realistic, Timebound.) You can find more information about this at <http://explearning.ucf.edu/registered-students/tips-for-success/writing-smart-learning-objectives/195>

You can find useful guides to writing learning objectives at the following locations:

A Quick Guide to Writing Learning Objectives:

- <http://www.nwlink.com/~donclark/hrd/templates/objectivetool.html>

Guidelines for Writing Learning Objectives:

- <http://apha.confex.com/apha/learningobjectives.htm>

Writing Quality Learning Objectives <http://www.learninginstitute.qmul.ac.uk/wp-content/uploads/2011/05/Aims-and-Outcomes-Guide.pdf>

Bloom's Taxonomy

You may find it useful to investigate Bloom's Taxonomy as a framework for writing learning objectives. In 1956 Benjamin Bloom wrote a book entitled "Taxonomy of Educational Objectives" which has been widely adopted within the educational community as the de facto way of classifying **cognitive competence**. An updated version of the book, edited by Anderson and Krathwohl was published in 2001. You can easily find it at www.amazon.co.uk and other online bookshops.

Bloom's Taxonomy is a simple way of categorising cognitive skills. It has six levels:

- 1. knowledge
- 2. comprehension
- 3. application
- 4. analysis
- 5. synthesis
- 6. evaluation.

You can get further information at: <http://www.bobbyelliott.com/Taxonomy.htm>



ACTIVITY 3.1

Choose a simple task, e.g.: "Using tables in Word" and write learning objectives for it.

(Try to choose a task which is of some relevance to you, or to one of your clients, as we'll be using it for activities throughout this section.)

Structuring learning

In structuring learning you should take account of the learning cycle. In its simplest (3 stage) form the way in which learning takes place may be expressed as plan, do and review. See <http://www.wilderdom.com/experiential/elc/ExperientialLearningCycle.htm> for more detail.

or Kolb's more sophisticated version:

<http://www.businessballs.com/kolblearningstyles.htm>

Learning sequence

You should be able to devise a **logical sequence** for the learning, taking account of which parts of the learning are a precursor for others, moving from simpler to more complex concepts and grouping related topics together.

Any session should have a **beginning** (where the objectives are clearly stated and agreed by the candidate and the learners), a **middle** (where the learning activities are undertaken) and an **end** (where the learning is summarised and next steps agreed).

The learning plan should be made clear to the learners when the learning programme commences. In structuring the learning the candidate should ensure that a variety of **learning experiences** are included to prevent tedium from demotivating the learner.

You can find a lot of useful information about **structuring learning** from the link below. Although it is specifically aimed at teachers, most of the information given is equally applicable in other learning contexts.

<http://www.teachfind.com/national-strategies/foundation-subjects-strand-key-messages-about-teaching-and-learning-in-primary-schools>



ACTIVITY 3.2

Draw up a learning plan to allow a specific client to achieve the objectives you listed in the previous activity. Your plan should take account of the client's preferred learning style.

Using ICT to create learning materials

Your approach to the use of software to create learning materials will be dependent on the availability of software within your own organisation. There are several **courseware creation packages** available, which can be used. Although they offer many features to include multimedia etc., the vital advantage is that they provide routing (branching and looping) through the material allowing learners to take their own appropriate path. They can also provide automated and recorded assessment.

One easy-to-use package is **Course Genie**, which lets you create course materials in Word and convert them automatically to HTML. This software has now been superceeded by Wimba Create:

http://www.wimba.com/products/wimba_create

This site also offers extensive demos on the use of the software.

Other examples of content creation software include **Authorware**, **Director** and **Dreamweaver** (<http://www.macromedia.com>) and products such as **Lectora** (<http://www.lector.co.uk>). It should be noted that these are complex products and you may require specialised training to achieve maximum benefit.

If specialised software is not available, there are other ICT routes. Word processing software such as Microsoft Word can be used to author content. Graphics, animations, videos and sound files can also be included in the document, as well as text. Animations and sound files will then operate when the document is viewed on a computer.

A more polished package can be created by using presentation software such as **Microsoft PowerPoint**. The greatest advantage is that this will create a page-based approach. Additionally a **common look** can be created throughout the whole package. Again, sound or still and moving visual effects can be incorporated.

You should have knowledge of how both specialised and general software can be used to create a learning package and have experience of authoring with either general or specialised software.

You can use a site like: <http://www.jiscrsc.ac.uk/scotland> which has a range of practical units on making the most of Microsoft software aimed at designing simple learning episodes.



ACTIVITY 3.3

Use the package of your choice to create a short learning episode designed to meet one of the objectives you outlined earlier.

Selecting and merging content from internal and external sources

You should appreciate that it is not always necessary to produce **original content** for learning packages. A wealth of learning material is available through the Internet and much of this is copyright free for educational purposes. You should ensure that any chosen material matches the learning objectives and style of the complete package and that the use which is made of the chosen material is fully compliant with copyright.

You can often find useful materials quickly with a search engine, but you may also like to check some of the following links:

The BBC offers a number of useful online courses on PC-related topics: <http://www.bbc.co.uk/learning/onlinecourses/>

You can find useful online resources for learning about Microsoft Office products at: <http://office.microsoft.com/en-us/training-FX101782702.aspx>

If your library is an SQA centre, you may be able to get access to the **PC Passport** materials produced by SQA. You can get more information at: <http://www.sqa.org.uk/pcpassport>

If you have access to these materials you can download them in Word format, allowing you to modify them if you wish.

There are also a number of low-cost or open source courseware suppliers. For example, **Moodle**⁶ is open source software widely used by schools, colleges and universities



ACTIVITY 3.4

See if you can use a search engine to locate any resources which would be useful for meeting the learning objectives you outlined earlier.

14.4 Support individuals and groups in their use of learning materials

14.4.1 Types of support

We often see the terms coaching, mentoring and training used in relation to workplace learning.



Before proceeding, can you write down a short definition of each of these terms, as you understand them?

Support roles

Although there may be some argument over the precise meaning of these terms, the following definitions bring out the key differences between them.

6 <https://moodle.org/>

In **coaching**, the learner and the coach are active collaborators. The coach observes the learner in a real, naturally occurring workplace situation as they try to complete tasks. The coach provides hints, help, and feedback as needed.

Mentoring involves a sustained relationship between the learner and the mentor who offers support, guidance, and assistance.

Training is more formal learning, and more of a one-way process, where the trainer imparts skills and knowledge to the learner.

Coaching

Coaching was originally used in business to describe support given to people who were seen as under-performing in some way. Now it is more usually seen as a means of supporting people on the job in order to help them **improve their competence** and achieve their maximum potential. The analogy of the sports coach developing the tennis player to improve their techniques and win more matches may be helpful.

Coaching is generally considered to be a fairly **short-term** activity, related to specific objectives. It consists of a one-to-one interaction between the coach and the person being coached in a relatively informal setting. The aim is to provide the learner with feedback in their performance together with suggestions on how to improve from a knowledgeable and skilled person.

Skilled coaches know when to be **directive** and when to be **passive**. They can distinguish between situations when it is appropriate to **intervene** to support the learner and when it is more effective to permit independent learning even though this involves the learner making mistakes.

Mentoring

Mentoring has become very fashionable in the last few years. Although mentoring is a relatively widespread practice there is no **formal definition** of what mentoring is but, generally speaking, it could be defined as a relationship between two people - the mentee (the person being mentored) and the mentor - which will positively affect the development of at least one of them. Note the phrase "positively affect the development of at least one of them". This recognises the fact that most mentors will say that they too have gained from the experience of mentoring.



ACTIVITY 4.1

Think of people who have had a significant influence on the development, progression and direction of your career. You may come up with several. Now identify what they did which influenced you.

Significant influences

You will probably find that the people who have affected your career significantly:

- Guided you
- Supported you
- Created opportunities for you
- Provided a role model for you.

By doing one or more of these things they were fulfilling the role of a mentor in some way. Someone who is designated as a formal mentor will do all of the above. The mentoring relationship will last over a period of time. This allows mentor and mentee to get to know and trust one another.



Before proceeding, write down the qualities which you consider a good mentor would require.

Mentor qualities

We think that a good mentor should:

- Provide a **good role model**
- Possess excellent **communication skills**
- Be able to **empathise** with the mentee
- Recognise that learners have **different motivations, skills, knowledge and needs** and be able to capitalise on these
- Be good at **spotting learning opportunities** and challenges which will assist the mentee's development
- Be **well informed** about the objectives and content of the training programme being undertaken by the mentee in order to provide maximum support
- Provide **meaningful feedback** to the mentee
- Understand that sometimes it may be necessary to **push** the mentee to move out of their comfort zone
- Encourage the mentee to **think for themselves** and work out solutions to problems

From the above you can appreciate how useful coaches and mentors could be in supporting the learning programme which you are delivering.

To find out more about coaching and mentoring, look at:

- [http://www.coachingnetwork.org.uk/ResourceCentre/
WhatAreCoachingAndMentoring.htm](http://www.coachingnetwork.org.uk/ResourceCentre/WhatAreCoachingAndMentoring.htm)

Training

Training is more directive than either coaching or mentoring. It involves the learners receiving input from the trainer in the form of instruction. Training is always specific and may be long or short term. The trainer is your role! This unit explores the skills you require and the methods you may use to deliver direct training to the learners.

As the trainer, you must consider the ways in which coaches and/or mentors could contribute to the progress of your learners. You must exercise care in the choice of staff to undertake the coaching/mentoring role. As well as having the necessary work-related knowledge and skills, they must be in a position to devote time to coaching/mentoring and should be able to develop a real rapport with your learners.

QUESTION TextEntry1: Coaching, Mentoring or Training

14.4.2 First line ICT support

You are designing and delivering training on ICT related topics. It is therefore very likely that your learners themselves will be operating ICT equipment as part of the learning programme. When a learner is using any type of computerised equipment, it is likely that from time to time some **technical snags** will arise.

You must be able to assist the learner with straightforward trouble shooting e.g. printing problems because the page set-up is not correct; computer “hanging”; changing screen resolution. You should also be able to assist any learner with special needs to use appropriate features of the technology.

We are not suggesting that you should possess sophisticated trouble shooting skills: this is the responsibility of ICT technical staff. You should simply be able to cope with typical, straightforward difficulties which can arise.

The next few pages summarise some of the most common problems you are likely to encounter, together with some tips on how to solve these.

The monitor appears blank

- Check to see if the computer has ‘gone to sleep’ by pressing the **space bar** on the keyboard.
- Check that the monitor is **switched on** and connected to the mains i.e. is the power light illuminated?
- Check that the monitor is **correctly connected** to the computer.
- Check to see if the system works after the computer is **reset** or switched off at the mains and on again.

The computer hangs

Sometimes, after using the computer for some time, it ‘hangs’; neither keyboard nor mouse appears to operate.

- Wait a while to see if the computer is performing some **intensive task** and recovers.
- Try **CtrlAltDel**. If you are lucky it will bring up a task manager window which will show you which application is not responding and allow you to close down only that application.
- Use the **reset button** to restart the computer.
- **Switch the computer off** at the mains and then on again.

Monitor text is too small

Sometimes a client has difficulty reading off the monitor because the text is too small.

- If this is confined to a particular application, it is usually possible to adjust the **zoom setting**. If this does not appear in a box near the top of the window, it will be found in the menu system under View: Zoom or View: Text size.
- If this applies to everything on the monitor, then, if you have access rights, you can change the **monitor settings**. Right click with the mouse on the desktop, choose Properties from the resulting menu, choose the Settings tab from the dialogue box, reduce the Screen resolution setting and OK. Unfortunately, the lower the screen resolution, the less can be displayed on the monitor. This often results in an uneasy compromise for people with problems with their sight.

Nothing comes out of the printer

- Check that the printer is switched on and connected to the mains i.e. is the power light illuminated?
- Check that the printer is **correctly connected** to the computer.
- Check that the printer has **paper** in it.
- Check the **ink supply**.
- Try printing a **test page**.
- Check the print settings in both the operating system and the application to see that the computer is looking for the correct printer and that the correct size of paper has been selected and that manual/auto (as appropriate) is chosen.

Print layout is wrong

Sometimes the printer does not seem to use the whole of the sheet of paper and the layout is not the same as on the monitor.

When using a word processor like Word, it is possible to set the **paper size** in the application. However there is also a setting for the printer itself. If these two settings are different, then the output will not appear correctly on the page. The driver for a newly connected printer may default to US legal for the paper size. It is normal to use A4 in this country and applications will use this as default. Go to the printer properties and check the paper size. Start: Settings: Printers: right click on the printer concerned, choose Properties and select the Device settings tab.

Disk is full

Sometimes, when saving data from an Office application like Word, the message comes up that the disk is full.

- It may be that the client's **floppy disk or pen drive** is full. This is quite likely for any sizeable word-processed document especially if it contains graphics or other embedded items.
- A fault condition can arise concerning interaction between the application and the operating system which results in a false reporting of the disk full error. This is irretrievable and requires the computer to be rebooted. If the client will lose a fair amount of unsaved data, it is worth opening a new document and **copy and pasting** from the original to the new document and then trying to save that. You may be lucky!
- Note: a similar problem can occur regarding the **computer** running out of memory. Again only rebooting the computer will correct the situation.

The printer jams

There is no universal solution for this problem as each printer has its own unique mechanism. The best you can do is to familiarise yourself with the various types of printer in your library and how to un-jam each.

14.5 Evaluate and revise learning materials and programmes

14.5.1 Assessing learner progress

When the learning programme is underway, you will want to **review regularly** how your learners are progressing towards their objectives. We should make it clear at this point that this unit is intended for library staff who find themselves in the role of educators and not for those who are required to undertake formal assessment of learners for National or Scottish Vocational Qualifications or other workplace awards. That type of assessment must be undertaken by someone who has an assessor or teacher qualification.

In this unit we are concerned only with assessment which will give **feedback** to the learner on his/her progress towards the learning objectives and to you, the trainer, as to how effective the learning programme has been. (You may see this referred to as "formative"

assessment.) In this context you will use methods which are as non-threatening as possible to the learner.

T

Before proceeding, note down any ways that you could use to assess how well your learners are progressing.

Methods of assessing progress

We can think of quite a few methods of assessing learner progress. Two of the commonest are:

- Direct observation
- Examination of products

Direct Observation

The most immediate method is to observe directly the **activities** being undertaken by the learners during the learning programme. From this you will get a clear idea as to whether your learners are actually managing the tasks they have been set and how well they are coping.

While you are not in any way ‘giving marks’, you can use this information in two ways. Firstly you can use it to provide a little bit more assistance to any learners having difficulty. Secondly you can use it to assess the success of your own approach in delivering the learning.

Trainers benefit from **observing the learners** at all points in the learning programme, not just when they are involved in specific tasks. Their facial expressions and body language will give you feedback on how well the training is being received. If you notice a learner, yawning, fidgeting or gazing out of the window while you are explaining a topic, it is unlikely that they are absorbing the information fully.

Perhaps they know this information already, perhaps the material is too advanced for them, perhaps your explanation has confused them – in all of these cases, you need to take some action in order to re-engage them in the learning process.

Examination of products

Many of the learning activities you will ask the learners to undertake will produce a result which can be checked. This may be a **printout** or **screen dump** or perhaps a **file**. This is an excellent method to use for feedback purposes because, if your learning is well designed, the product will not be seen as something artificial, produced solely for assessment purposes. Also, as evidence, it should be fairly incontrovertible, either there will be a result or not.

Examining products gives you **feedback** without the learner really being aware that their performance is being assessed. You can simply review the product with the learner, leading naturally into a discussion of how easy it was to produce this, how it might be improved etc.

Assessment ‘lite’

You may find it useful to use some methods which veer in the direction of traditional educational assessment. For example, you can carry out a **quiz** or use a simple tick box test. You can construct these yourself or tap into ones which experts have designed.



ACTIVITY 5.1

Go to <http://www.learner.org/courses/neuroscience/interactives/interactive2.html> and try the learning related quiz which explores whether your left or right side of the brain is dominant. This quiz is quick and fun to complete. Although it is simple it would give you some useful feedback on your learners if you asked them to complete it before embarking on the learning programme.

When making up simple tests, it is best to confine yourself to TRUE/FALSE or “fill in the blanks” (sometimes called CLOZE) questions. Compiling multiple-choice questions requires a great deal of skill and is best left to specialists.

True/False Test on Word Processing

Indicate if the following statements are true or false.

- | | |
|---|-------|
| 1 To copy and paste, you use Ctrl C and Ctrl V | True |
| 2 A text with a straight margin on the right hand side is called “right justified” | True |
| 3 Pressing the Delete key removes letters to the left of the cursor. | False |
| 4 We change the colour of the text by highlighting it and left clicking | False |
| 5 Arial is the name of a font. | True |
| 6 Left clicking on a word in the text activates the spell checker. | False |
| 7 The “save as” command is used to save a copy of the document as a duplicate file. | True |
| 8 To change the style of bullet points, you must go to the format menu. | True |
| 9 A running title along the top of pages in a document is called a tag line. | True |

- 10 You use the thesaurus feature to find alternative spellings of a word True

Cloze Question on Word Processing

A text with a straight margin down the right hand side is called _____ justified.

Direct Feedback

Here you can obtain feedback from individual learners using **verbal interaction** . This can best be done during or perhaps towards the end of a training session.

You can also allow the learner to create direct feedback by issuing **scorecards** . The learner can use these to record the tasks in which they consider themselves to be competent as they progress through the learning.

A simple scorecard

This illustrates a scorecard for a learner who is part way through a learning programme on training needs analysis techniques.

Training Needs Analysis Techniques

Use this scorecard to record your competence in the use of the techniques covered in the programme. You are asked to review this at the end of each weekly session. The numerical scale represents 0 = I have no experience of this at all to 5 = I am 100% competent in using this technique

	0	1	2	3	4	5
Direct observation of the learner using ICT in the workplace						
Examination of learner's work samples or work records						
Practical tests and assessments of the learner's use of ICT						
Questionnaires or checklists covering key ICT competences						
Examination of the learner's staff appraisal reports						
Interviews with learner, manager, colleagues, tutors, clients						
Focus groups of learners, colleagues, managers etc.						

Computer Based Assessment

Some ICT based learning packages incorporate **diagnostic tests** which score and benchmark learner competence automatically as they work through the package. It is best to use a method where the learner sees the result and not something which appears secret and is suddenly sprung on the learner at the end of the course of learning.

Alternatively you can use special software such as **Hot Potatoes** to create your own computer based assessment tools. If you wish to read more about this, look at: http://www.ucl.ac.uk/isd/staff/e-learning/tools/hot_potatoes

14.5.2 Designing feedback tools

The previous section dealt with **evaluating** the learning you have developed in terms of assessing the learners' progress towards the learning objectives. It is also important to evaluate the learning you have developed by getting feedback on the learning experience. As you can imagine, the overall quality of the learning experience has a deal of effect on the rate of progress of the learner.



Before proceeding, note down which aspects of the learning experience you would want to ask the learners about.

Aspects requiring feedback

Here is a list of issues we would expect to be included in feedback on the learning experience. You may have thought of some additional points.

- Were the **learning objectives** relevant?
- Did the **content** match the stated learning objectives?
- Was the **quality** of the learning materials satisfactory?
- Did the trainer provide sufficient **support** ?
- Was the trainer's **presentation** clear?
- Was the **learning environment** pleasant?
- Were there any deficiencies or problems with the **equipment** ?
- Was the **learning experience** enjoyable?

You can see that we have included a mixture of issues relating to learning objectives and delivery/support, as well as on the learning environment and enjoyment.

Objectives related issues

- Were the learning objectives relevant?
- Did the content match the stated learning objectives?

This area is important because the learner's **perception** of the relevancy of the objectives is what matters. If you are not getting this relevancy over to the learners, then you will have great motivational problems. Also once the learner has accepted that the objectives are relevant, they must experience the content you provide as being the correct material.

Although trainers may sometimes dismiss **negative feedback** from one individual learner in this area, it is clear that a low score from a significant number of learners for this area needs a serious response on your behalf.

Delivery related issues

- Was the **quality** of the learning materials satisfactory?
- Did the trainer provide sufficient **support** ?
- Was the trainer's **presentation** clear?

This are core areas for you as a trainer because they are the areas you have most control over and input into.

If the learners consider the **quality of the learning materials** to be unsatisfactory, you should probe this further to find the exact cause of their dissatisfaction – were the materials at the correct level, clearly expressed, professionally presented, attractive to look at etc.

Different learners will require varied **levels of support** from the trainer. In this instance, negative feedback from just one or two learners is significant because it can indicate that you have tailored your level of support to suit the majority of the group and ignored the needs of those who are finding the learning more difficult than average.

Individual learners will undoubtedly have different views on the **learning experience** in terms of the trainer's delivery – an element of personality is involved here. But again, if there is not a broad positive result from your learners in this area, you will have to look very closely at what you are doing.

Learning environment issues

- Was the **learning environment** pleasant?
- Were there any deficiencies or problems with the **equipment** ?

This area is one where the trainer may have limited control. If you are allocated a dingy windowless room in which to carry out the training, or if you are given an old slow PC to carry out your ICT demonstrations on, you will have real problems in providing a good learning experience. Try to pre-empt complaints on the learning environment by resolving any such difficulties **in advance** of delivering the learning.

Enjoyable experience

- Was the learning experience enjoyable?

Finally we consider an overall question as to whether the learning was enjoyable. Is this a valid question? Well, if the learners did not enjoy the experience, it is unlikely that they benefited fully from it or that they will ever come back willingly for more!

Feedback form design

There are different methods of obtaining feedback. You can use **paper forms** handed out to the learners, or utilise a **computerised approach**.

Types of feedback form

As we saw on the previous page, you should try to create questions which are:

- **relevant** to the area to be evaluated
- expressed in **neutral terms** so as not to prompt a certain answer
- **clearly phrased** and non ambiguous.

In order to compare feedback from different learners or groups of learners, it is best to design feedback forms in which learners can score different aspects of the learning on a scale, by ticking the box corresponding to their choice.

You might offer five choices.

Very Poor Poor Acceptable Good Excellent

But you can apply some psychology here. If you have an odd number of possible ratings as we have here (5), there is a tendency for learners just to choose the **middle** one. You can try to force them to make a more measured evaluation by having an even number of possibilities which makes them positively choose.

Poor Acceptable Good Excellent

These four categories can be represented by numerical values, say zero to three.

- Poor = 0
- Acceptable = 1
- Good = 2
- Excellent = 3

Doing this, allows you to carry out some simple statistics, such as finding the average response for the whole group of learners and to compare the overall response of different groups.

Feedback statistics

Perhaps it's easier to see this in an example. Imagine you have a group of 10 learners. Their answers to the questions on the feedback form are:

- Poor – 0 responses
- Acceptable – 3 responses
- Good – 6 responses
- Excellent – 1 response

This converts to a total of 18 ($0 \times 0 + 3 \times 1 + 6 \times 2 + 1 \times 3$). Dividing 18 by the number of learners (10) gives an **overall score** of 1.8 for the group as a whole, equating to Good.

Another way of looking at this data is to produce a **graph**.

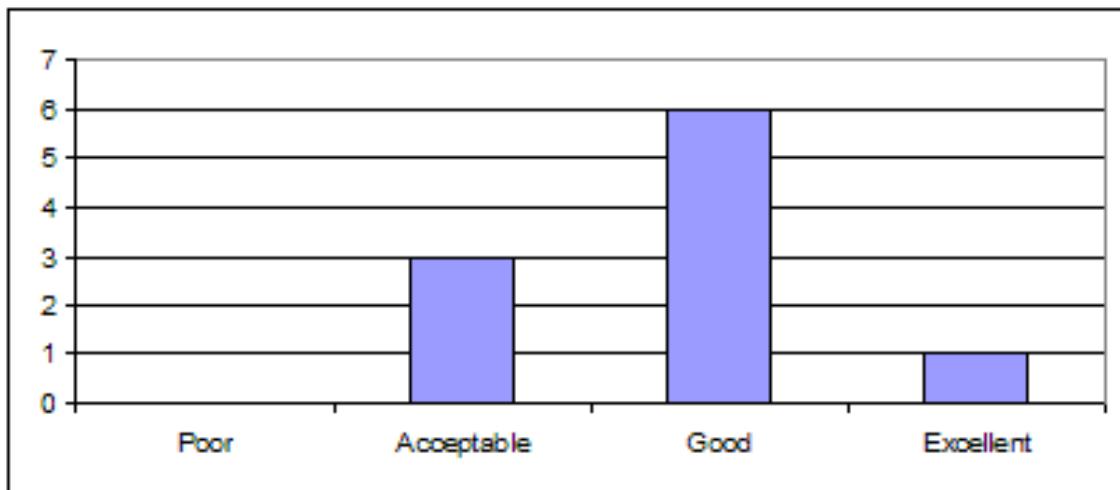


Figure 176

You can then make a **visual comparison** of the results for each question.

Unstructured feedback

Of course you should allow the learners to provide some feedback on the form which is not structured by your questions. It is important to leave space for them to make **comments**, either throughout the form at appropriate questions or at the end under 'any other comments'.

To analyse these, you should simply list the actual responses and note any duplicated points of view.

There are a couple of other points to note apart from question design if you are to motivate your learners to make a good job of completing the form

Before proceeding, note down anything else that you can think of that should be in the **feedback form design** if it is to be successful in its purpose.

Essential elements of feedback form design

Well, for the form to be successful, the **instructions must be easily understood** and it should be **easy to fill in**. It should also be **quick** for the learner to complete. This all suggests a **short questionnaire**, one or two sides maximum with a limited number of questions having straightforward possible responses

Simple feedback form

You can find many examples of simple course feedback forms on the internet

Commercial software and websites

You may also like to explore using commercial software such as **SurveyMonkey** which facilitates design of survey forms and collation and analysis of results via the Internet. See it at <http://www.surveymonkey.com>

There are many Internet websites offering advice on feedback form and questionnaire design. One problem is that many of them are aimed at professional researchers and thus too detailed. However, you may still benefit from looking at some of these sites, as the basic principles of questionnaire design are the same, regardless of the subject area being researched. Here are some suggested sites.

- <http://www.sysurvey.com/tips/wording.htm>
- <http://www.statpac.com/surveys/question-qualities.htm>

14.5.3 Assessing success of learning approaches

The diagram shows the training cycle. It represents a continuous process of:

- Identification of training needs
- Design of the training and learning programme
- Delivery of training and learning programme
- Evaluation of training and learning programme

For more information on the training cycle see:

<http://mournetrainingservices.blogspot.co.uk/2009/06/training-cycle-explained.html>

You have carried out the first three stages and are now about to carry out the fourth with the help of the feedback on the learning experience coupled with evidence on learner progress. In particular, the feedback will be used to assess the effectiveness of the design and delivery of the programme. This will feed into **revision** of those aspects of the learning programme which were judged to be less than satisfactory. With a further check on the identification of the needs and the re-design of materials and delivery, a cycle of continuous improvement is established.

You have essentially two sources of information for your evaluation:

- the **evidence** of learner progress
- the **feedback** on the quality of the learning experience.

Both are important and there are definite connections between the two. For instance, there could be a general reduction in learner progress not related to content and delivery issues but due to the learning taking place in a room which is always too hot resulting in the learners experiencing discomfort.

Learner progress

In analysing the learner progress, in order to create improvements, you must look for **trends**. The first time you deliver the training to a small group, poor performance from one learner may affect your results disproportionately. Over time and a large number of learners, this random effect diminishes. So you are looking for the particular topics and outcomes where a significant number of learners have difficulty.

Of course ‘a significant number’ is a matter of opinion. But let us say that, if out of a group of fifteen learners, three had a difficulty with one topic, while excelling at all the other topics, then we would say that is significant. So you need to look for these parts of the learning and revisit the design of those parts.

Learning experience

Most of the feedback will have been converted into a set of averaged numerical data representing the learner group as a whole. You now have to **interpret** this data. Broadly speaking, you are having no real problems if the scores hit a point somewhere a bit above the middle value. You cannot expect every learner to think that everything is perfect. On the other hand, remember that most people tend not to give low scores unless there is a real problem. Of course different learners will have different **expectations**. However, again the hope is that they will apply the same expectation level to each of the facets of the learning experience and this variable will average out over all the questions and learners.

There is one danger in using the **average** and getting a middling score. That is, if out of a group of, say, twenty learners, ten score highest and the other ten score lowest. This gives the appearance of a just acceptable result with no great worry. A score of 50% for the learning environment could be due to one side of a room being too cold. A score of 50% for relevance of course content could be due to a group of 20 where 10 thought the training was pitched at the ideal level and 10 who found most of the content already familiar.

So remember, you have to look at both the **average score** and the **spread of scores** across the group of learners.

Looking for trends

Regarding ‘Any other comments’, you are again looking for **trends**. If the same type of comments comes up three or four times out of a group of fifteen learners, then you need to address it.

When you are delivering training to colleagues within your own organisation, remember that you need not be completely reliant on written feedback forms. Most of the learners will be willing to provide **informal feedback** and suggestions for improvement orally.

You should also consider when to gather feedback. It is useful to gather opinions immediately after the conclusion of the training, when the content and delivery are fresh in the learners' minds. This can be supplemented by **further feedback** at a later date, if you wish to explore how useful the training has been to the learners in their workplace situation.

15 Digital Culture - Online Communication

15.1 Digital Culture - Online Communication

This is the first of two units that are relatively new additions to the Application of ICT in Libraries course. This session will explore the new digital literacies that you need to develop to be active users of Social Media tools and you will also get the chance to communicate online using a number of these services. The full course materials are hosted for registered students on the Application of ICT in Libraries¹ pages on Moodle.

This module will enable you to dip into new social media tools and explore their potential for supporting library services, your users and also your own interests. You learning outcomes will include:

- What is social media?
- What are the new digital literacies information professionals and our service users need to develop?
- How do I facilitate and take part in a conversation on a forum?
- How can I collaborate with my colleagues or manage a team online?
- What tools can I use for professional networking?
- How and why should I use a blogging tool?
- What are virtual communities?



Each learning outcome has a series of short activities that you will participate in with your class group. The tutor will deliver one face to face class session in North Wales and South Wales and the remainder of the time will facilitate the course online.

This is a practical module that uses social media to explore social media - you have permission to play!

¹ <https://moodle.gllm.ac.uk/course/view.php?id=507>

16 Digital Culture - Online Collaboration

16.1 Digital Culture - Online Collaboration

This is the second of two units that are relatively new additions to the Application of ICT in Libraries course. This session will explore the new digital literacies that you need to develop to be active users of Social Media tools and you will also get the chance to communicate online using a number of these services. The full course materials are hosted for registered students on the Application of ICT in Libraries¹ pages on Moodle.

This module will enable you explore more fully the collaborative nature of social media and work within a group to complete all the learning outcomes. You learning outcomes will include:

- Exploring virtual communities and how the concept of 'community' changed with the spread of social media
- Using a forum to facilitate professional discussions
- Using collaborative documents and cloud computing to complete a group project
- Exploring the potential of social networking for continuing professional development
- Developing, editing and publishing a collaborative blog
- Meeting, collaborating and exploring with your group in a virtual world



Each learning outcome has a series of short activities that you will participate in with your class group. The tutor will deliver one face to face class session in North Wales and South Wales and the remainder of the time will facilitate the course online. This is a practical module that uses social media to explore social media - you have permission to play!

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124 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

125 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

126 https://commons.wikimedia.org/wiki/File:A_cap.gif

127 <http://en.wikipedia.org/wiki/en:User:Bloglord>

128 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

129 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

15	<ul style="list-style-type: none"> • A cap.gif¹³⁰: Bloglord¹³¹ • derivative work: JK+ontic¹³² (talk¹³³) <ul style="list-style-type: none"> • A cap.gif¹³⁴: Bloglord¹³⁵ • derivative work: JK+ontic¹³⁶ (talk¹³⁷) 	PD
16	Original uploader was Bloglord ¹³⁸ at en.wikibooks ¹³⁹	
17	<ul style="list-style-type: none"> • A cap.gif¹⁴⁰: Bloglord¹⁴¹ • derivative work: JK+ontic¹⁴² (talk¹⁴³) <ul style="list-style-type: none"> • A cap.gif¹⁴⁴: Bloglord¹⁴⁵ • derivative work: JK+ontic¹⁴⁶ (talk¹⁴⁷) 	PD
18	Original uploader was Bloglord ¹⁴⁸ at en.wikibooks ¹⁴⁹	
19	<ul style="list-style-type: none"> • A cap.gif¹⁵⁰: Bloglord¹⁵¹ • derivative work: JK+ontic¹⁵² (talk¹⁵³) <ul style="list-style-type: none"> • A cap.gif¹⁵⁴: Bloglord¹⁵⁵ • derivative work: JK+ontic¹⁵⁶ (talk¹⁵⁷) 	PD

- 130 http://commons.wikimedia.org/wiki/File:A_cap.gif
 131 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 132 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 133 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 134 https://commons.wikimedia.org/wiki/File:A_cap.gif
 135 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 136 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 137 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 138 <http://en.wikibooks.org/wiki/en:User:Bloglord>
 139 <http://en.wikibooks.org>
 140 http://commons.wikimedia.org/wiki/File:A_cap.gif
 141 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 142 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 143 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 144 https://commons.wikimedia.org/wiki/File:A_cap.gif
 145 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 146 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 147 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 148 <http://en.wikibooks.org/wiki/en:User:Bloglord>
 149 <http://en.wikibooks.org>
 150 http://commons.wikimedia.org/wiki/File:A_cap.gif
 151 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 152 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 153 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 154 https://commons.wikimedia.org/wiki/File:A_cap.gif
 155 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 156 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 157 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

20	<ul style="list-style-type: none"> • A cap.gif¹⁵⁸: Bloglord¹⁵⁹ • derivative work: JK+ontic¹⁶⁰ (talk¹⁶¹) , • A cap.gif¹⁶²: Bloglord¹⁶³ • derivative work: JK+ontic¹⁶⁴ (talk¹⁶⁵) 	PD
21	<ul style="list-style-type: none"> • A cap.gif¹⁶⁶: Bloglord¹⁶⁷ • derivative work: JK+ontic¹⁶⁸ (talk¹⁶⁹) , • A cap.gif¹⁷⁰: Bloglord¹⁷¹ • derivative work: JK+ontic¹⁷² (talk¹⁷³) 	PD
22	<ul style="list-style-type: none"> • A cap.gif¹⁷⁴: Bloglord¹⁷⁵ • derivative work: JK+ontic¹⁷⁶ (talk¹⁷⁷) , • A cap.gif¹⁷⁸: Bloglord¹⁷⁹ • derivative work: JK+ontic¹⁸⁰ (talk¹⁸¹) 	PD

158 http://commons.wikimedia.org/wiki/File:A_cap.gif

159 <http://en.wikipedia.org/wiki/en:User:Bloglord>

160 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

161 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

162 https://commons.wikimedia.org/wiki/File:A_cap.gif

163 <http://en.wikipedia.org/wiki/en:User:Bloglord>

164 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

165 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

166 http://commons.wikimedia.org/wiki/File:A_cap.gif

167 <http://en.wikipedia.org/wiki/en:User:Bloglord>

168 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

169 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

170 https://commons.wikimedia.org/wiki/File:A_cap.gif

171 <http://en.wikipedia.org/wiki/en:User:Bloglord>

172 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

173 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

174 http://commons.wikimedia.org/wiki/File:A_cap.gif

175 <http://en.wikipedia.org/wiki/en:User:Bloglord>

176 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

177 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

178 https://commons.wikimedia.org/wiki/File:A_cap.gif

179 <http://en.wikipedia.org/wiki/en:User:Bloglord>

180 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

181 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

23	<ul style="list-style-type: none"> ● A cap.gif¹⁸²: Bloglord¹⁸³ ● derivative work: JK+ontic¹⁸⁴ (talk¹⁸⁵) , ● A cap.gif¹⁸⁶: Bloglord¹⁸⁷ ● derivative work: JK+ontic¹⁸⁸ (talk¹⁸⁹) 	PD
24	<ul style="list-style-type: none"> ● A cap.gif¹⁹⁰: Bloglord¹⁹¹ ● derivative work: JK+ontic¹⁹² (talk¹⁹³) , ● A cap.gif¹⁹⁴: Bloglord¹⁹⁵ ● derivative work: JK+ontic¹⁹⁶ (talk¹⁹⁷) 	PD
25	<ul style="list-style-type: none"> ● A cap.gif¹⁹⁸: Bloglord¹⁹⁹ ● derivative work: JK+ontic²⁰⁰ (talk²⁰¹) , ● A cap.gif²⁰²: Bloglord²⁰³ ● derivative work: JK+ontic²⁰⁴ (talk²⁰⁵) 	PD

182 http://commons.wikimedia.org/wiki/File:A_cap.gif
 183 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 184 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 185 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 186 https://commons.wikimedia.org/wiki/File:A_cap.gif
 187 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 188 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 189 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 190 http://commons.wikimedia.org/wiki/File:A_cap.gif
 191 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 192 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 193 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 194 https://commons.wikimedia.org/wiki/File:A_cap.gif
 195 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 196 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 197 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 198 http://commons.wikimedia.org/wiki/File:A_cap.gif
 199 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 200 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 201 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 202 https://commons.wikimedia.org/wiki/File:A_cap.gif
 203 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 204 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 205 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

26	<ul style="list-style-type: none"> • A cap.gif²⁰⁶: Bloglord²⁰⁷ • derivative work: JK+ontic²⁰⁸ (talk²⁰⁹) , • A cap.gif²¹⁰: Bloglord²¹¹ • derivative work: JK+ontic²¹² (talk²¹³) 	PD
27	<ul style="list-style-type: none"> • A cap.gif²¹⁴: Bloglord²¹⁵ • derivative work: JK+ontic²¹⁶ (talk²¹⁷) , • A cap.gif²¹⁸: Bloglord²¹⁹ • derivative work: JK+ontic²²⁰ (talk²²¹) 	PD
28	<ul style="list-style-type: none"> • A cap.gif²²²: Bloglord²²³ • derivative work: JK+ontic²²⁴ (talk²²⁵) , • A cap.gif²²⁶: Bloglord²²⁷ • derivative work: JK+ontic²²⁸ (talk²²⁹) 	PD

206 http://commons.wikimedia.org/wiki/File:A_cap.gif

207 <http://en.wikipedia.org/wiki/en:User:Bloglord>

208 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

209 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

210 https://commons.wikimedia.org/wiki/File:A_cap.gif

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212 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

213 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

214 http://commons.wikimedia.org/wiki/File:A_cap.gif

215 <http://en.wikipedia.org/wiki/en:User:Bloglord>

216 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

217 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

218 https://commons.wikimedia.org/wiki/File:A_cap.gif

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220 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

221 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

222 http://commons.wikimedia.org/wiki/File:A_cap.gif

223 <http://en.wikipedia.org/wiki/en:User:Bloglord>

224 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

225 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

226 https://commons.wikimedia.org/wiki/File:A_cap.gif

227 <http://en.wikipedia.org/wiki/en:User:Bloglord>

228 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

229 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

29	<ul style="list-style-type: none"> ● A cap.gif²³⁰: Bloglord²³¹ ● derivative work: JK+ontic²³² (talk²³³) ● A cap.gif²³⁴: Bloglord²³⁵ ● derivative work: JK+ontic²³⁶ (talk²³⁷) 	PD
30	<ul style="list-style-type: none"> ● A cap.gif²³⁸: Bloglord²³⁹ ● derivative work: JK+ontic²⁴⁰ (talk²⁴¹) ● A cap.gif²⁴²: Bloglord²⁴³ ● derivative work: JK+ontic²⁴⁴ (talk²⁴⁵) 	PD
31	<ul style="list-style-type: none"> ● A cap.gif²⁴⁶: Bloglord²⁴⁷ ● derivative work: JK+ontic²⁴⁸ (talk²⁴⁹) ● A cap.gif²⁵⁰: Bloglord²⁵¹ ● derivative work: JK+ontic²⁵² (talk²⁵³) 	PD

230 http://commons.wikimedia.org/wiki/File:A_cap.gif
 231 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 232 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 233 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 234 https://commons.wikimedia.org/wiki/File:A_cap.gif
 235 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 236 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 237 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 238 http://commons.wikimedia.org/wiki/File:A_cap.gif
 239 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 240 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
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 242 https://commons.wikimedia.org/wiki/File:A_cap.gif
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 245 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 246 http://commons.wikimedia.org/wiki/File:A_cap.gif
 247 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 249 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 250 https://commons.wikimedia.org/wiki/File:A_cap.gif
 251 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 252 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 253 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

32	<ul style="list-style-type: none"> ● A cap.gif²⁵⁴: Bloglord²⁵⁵ ● derivative work: JK+ontic²⁵⁶ (talk²⁵⁷) ● A cap.gif²⁵⁸: Bloglord²⁵⁹ ● derivative work: JK+ontic²⁶⁰ (talk²⁶¹) 	PD
33	<ul style="list-style-type: none"> ● A cap.gif²⁶²: Bloglord²⁶³ ● derivative work: JK+ontic²⁶⁴ (talk²⁶⁵) ● A cap.gif²⁶⁶: Bloglord²⁶⁷ ● derivative work: JK+ontic²⁶⁸ (talk²⁶⁹) 	PD
34	<ul style="list-style-type: none"> ● A cap.gif²⁷⁰: Bloglord²⁷¹ ● derivative work: JK+ontic²⁷² (talk²⁷³) ● A cap.gif²⁷⁴: Bloglord²⁷⁵ ● derivative work: JK+ontic²⁷⁶ (talk²⁷⁷) 	PD

254 http://commons.wikimedia.org/wiki/File:A_cap.gif
 255 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 257 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 258 https://commons.wikimedia.org/wiki/File:A_cap.gif
 259 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 260 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 261 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 262 http://commons.wikimedia.org/wiki/File:A_cap.gif
 263 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 270 http://commons.wikimedia.org/wiki/File:A_cap.gif
 271 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 273 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 274 https://commons.wikimedia.org/wiki/File:A_cap.gif
 275 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 277 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

35	<ul style="list-style-type: none"> ● A cap.gif²⁷⁸: Bloglord²⁷⁹ ● derivative work: JK+ontic²⁸⁰ (talk²⁸¹) ● A cap.gif²⁸²: Bloglord²⁸³ ● derivative work: JK+ontic²⁸⁴ (talk²⁸⁵) 	PD
36	<ul style="list-style-type: none"> ● A cap.gif²⁸⁶: Bloglord²⁸⁷ ● derivative work: JK+ontic²⁸⁸ (talk²⁸⁹) ● A cap.gif²⁹⁰: Bloglord²⁹¹ ● derivative work: JK+ontic²⁹² (talk²⁹³) 	PD
37		
38	<ul style="list-style-type: none"> ● A cap.gif²⁹⁴: Bloglord²⁹⁵ ● derivative work: JK+ontic²⁹⁶ (talk²⁹⁷) ● A cap.gif²⁹⁸: Bloglord²⁹⁹ ● derivative work: JK+ontic³⁰⁰ (talk³⁰¹) 	PD

278 http://commons.wikimedia.org/wiki/File:A_cap.gif
 279 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 280 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 281 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 282 https://commons.wikimedia.org/wiki/File:A_cap.gif
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 285 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 286 http://commons.wikimedia.org/wiki/File:A_cap.gif
 287 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 290 https://commons.wikimedia.org/wiki/File:A_cap.gif
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 293 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 294 http://commons.wikimedia.org/wiki/File:A_cap.gif
 295 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 297 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 298 https://commons.wikimedia.org/wiki/File:A_cap.gif
 299 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 300 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 301 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

39	<ul style="list-style-type: none"> • A cap.gif³⁰²: Bloglord³⁰³ • derivative work: JK+ontic³⁰⁴ (talk³⁰⁵) , • A cap.gif³⁰⁶: Bloglord³⁰⁷ • derivative work: JK+ontic³⁰⁸ (talk³⁰⁹) 	PD
40	<ul style="list-style-type: none"> • A cap.gif³¹⁰: Bloglord³¹¹ • derivative work: JK+ontic³¹² (talk³¹³) , • A cap.gif³¹⁴: Bloglord³¹⁵ • derivative work: JK+ontic³¹⁶ (talk³¹⁷) 	PD
41	<ul style="list-style-type: none"> • A cap.gif³¹⁸: Bloglord³¹⁹ • derivative work: JK+ontic³²⁰ (talk³²¹) , • A cap.gif³²²: Bloglord³²³ • derivative work: JK+ontic³²⁴ (talk³²⁵) 	PD

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- 302 http://commons.wikimedia.org/wiki/File:A_cap.gif
 303 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 304 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 305 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 306 https://commons.wikimedia.org/wiki/File:A_cap.gif
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 310 http://commons.wikimedia.org/wiki/File:A_cap.gif
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 318 http://commons.wikimedia.org/wiki/File:A_cap.gif
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 321 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 322 https://commons.wikimedia.org/wiki/File:A_cap.gif
 323 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 324 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 325 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

42	<ul style="list-style-type: none"> • A cap.gif³²⁶: Bloglord³²⁷ • derivative work: JK+ontic³²⁸ (talk³²⁹) • A cap.gif³³⁰: Bloglord³³¹ • derivative work: JK+ontic³³² (talk³³³) 	PD
43	<ul style="list-style-type: none"> • A cap.gif³³⁴: Bloglord³³⁵ • derivative work: JK+ontic³³⁶ (talk³³⁷) • A cap.gif³³⁸: Bloglord³³⁹ • derivative work: JK+ontic³⁴⁰ (talk³⁴¹) 	PD
44	<ul style="list-style-type: none"> • A cap.gif³⁴²: Bloglord³⁴³ • derivative work: JK+ontic³⁴⁴ (talk³⁴⁵) • A cap.gif³⁴⁶: Bloglord³⁴⁷ • derivative work: JK+ontic³⁴⁸ (talk³⁴⁹) 	PD

326 http://commons.wikimedia.org/wiki/File:A_cap.gif
 327 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 328 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
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 330 https://commons.wikimedia.org/wiki/File:A_cap.gif
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 332 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
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 334 http://commons.wikimedia.org/wiki/File:A_cap.gif
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 342 http://commons.wikimedia.org/wiki/File:A_cap.gif
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 345 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 346 https://commons.wikimedia.org/wiki/File:A_cap.gif
 347 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 348 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 349 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

45	<ul style="list-style-type: none"> • A_cap.gif³⁵⁰: Bloglord³⁵¹ • derivative work: JK+ontic³⁵² (talk³⁵³) , • A_cap.gif³⁵⁴: Bloglord³⁵⁵ • derivative work: JK+ontic³⁵⁶ (talk³⁵⁷) 	PD
46	<ul style="list-style-type: none"> • A_cap.gif³⁵⁸: Bloglord³⁵⁹ • derivative work: JK+ontic³⁶⁰ (talk³⁶¹) , • A_cap.gif³⁶²: Bloglord³⁶³ • derivative work: JK+ontic³⁶⁴ (talk³⁶⁵) 	PD
47	Original uploader was Bloglord ³⁶⁶ at en.wikibooks ³⁶⁷	
48	Original uploader was Bloglord ³⁶⁸ at en.wikibooks ³⁶⁹	
49	Original uploader was Bloglord ³⁷⁰ at en.wikibooks ³⁷¹	
50	<ul style="list-style-type: none"> • A_cap.gif³⁷²: Bloglord³⁷³ • derivative work: JK+ontic³⁷⁴ (talk³⁷⁵) , • A_cap.gif³⁷⁶: Bloglord³⁷⁷ • derivative work: JK+ontic³⁷⁸ (talk³⁷⁹) 	PD

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51	<ul style="list-style-type: none"> • A cap.gif³⁸⁰: Bloglord³⁸¹ • derivative work: JK+ontic³⁸² (talk³⁸³) • A cap.gif³⁸⁴: Bloglord³⁸⁵ • derivative work: JK+ontic³⁸⁶ (talk³⁸⁷) 	PD
52	<ul style="list-style-type: none"> • A cap.gif³⁸⁸: Bloglord³⁸⁹ • derivative work: JK+ontic³⁹⁰ (talk³⁹¹) • A cap.gif³⁹²: Bloglord³⁹³ • derivative work: JK+ontic³⁹⁴ (talk³⁹⁵) 	PD
53	<ul style="list-style-type: none"> • A cap.gif³⁹⁶: Bloglord³⁹⁷ • derivative work: JK+ontic³⁹⁸ (talk³⁹⁹) • A cap.gif⁴⁰⁰: Bloglord⁴⁰¹ • derivative work: JK+ontic⁴⁰² (talk⁴⁰³) 	PD

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55	Original uploader was Bloglord ⁴¹² at en.wikibooks ⁴¹³	
56	<ul style="list-style-type: none"> • A cap.gif⁴¹⁴: Bloglord⁴¹⁵ • derivative work: JK+ontic⁴¹⁶ (talk⁴¹⁷) • A cap.gif⁴¹⁸: Bloglord⁴¹⁹ • derivative work: JK+ontic⁴²⁰ (talk⁴²¹) 	PD
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58	Original uploader was Bloglord ⁴³⁰ at en.wikibooks ⁴³¹	
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62	<ul style="list-style-type: none"> • A cap.gif⁴³⁸: Bloglord⁴³⁹ • derivative work: JK+ontic⁴⁴⁰ (talk⁴⁴¹) , • A cap.gif⁴⁴²: Bloglord⁴⁴³ • derivative work: JK+ontic⁴⁴⁴ (talk⁴⁴⁵) 	PD
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65	Original uploader was Bloglord ⁴⁶² at en.wikibooks ⁴⁶³	

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67	<ul style="list-style-type: none"> • A cap.gif⁴⁷²: Bloglord⁴⁷³ • derivative work: JK+ontic⁴⁷⁴ (talk⁴⁷⁵) , • A cap.gif⁴⁷⁶: Bloglord⁴⁷⁷ • derivative work: JK+ontic⁴⁷⁸ (talk⁴⁷⁹) 	PD
68	Original uploader was Bloglord ⁴⁸⁰ at en.wikibooks ⁴⁸¹	
69	<ul style="list-style-type: none"> • A cap.gif⁴⁸²: Bloglord⁴⁸³ • derivative work: JK+ontic⁴⁸⁴ (talk⁴⁸⁵) , • A cap.gif⁴⁸⁶: Bloglord⁴⁸⁷ • derivative work: JK+ontic⁴⁸⁸ (talk⁴⁸⁹) 	PD

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71	<ul style="list-style-type: none"> • A cap.gif⁴⁹⁸: Bloglord⁴⁹⁹ • derivative work: JK+ontic⁵⁰⁰ (talk⁵⁰¹) <ul style="list-style-type: none"> • A cap.gif⁵⁰²: Bloglord⁵⁰³ • derivative work: JK+ontic⁵⁰⁴ (talk⁵⁰⁵) 	PD
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74	<ul style="list-style-type: none"> • A cap.gif⁵¹⁶: Bloglord⁵¹⁷ • derivative work: JK+ontic⁵¹⁸ (talk⁵¹⁹) , • A cap.gif⁵²⁰: Bloglord⁵²¹ • derivative work: JK+ontic⁵²² (talk⁵²³) 	PD
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76	<ul style="list-style-type: none"> • A cap.gif⁵³²: Bloglord⁵³³ • derivative work: JK+ontic⁵³⁴ (talk⁵³⁵) , • A cap.gif⁵³⁶: Bloglord⁵³⁷ • derivative work: JK+ontic⁵³⁸ (talk⁵³⁹) 	PD

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81	<ul style="list-style-type: none"> • A cap.gif⁵⁷²: Bloglord⁵⁷³ • derivative work: JK+ontic⁵⁷⁴ (talk⁵⁷⁵) , • A cap.gif⁵⁷⁶: Bloglord⁵⁷⁷ • derivative work: JK+ontic⁵⁷⁸ (talk⁵⁷⁹) 	PD
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 588 <http://en.wikibooks.org/wiki/en:User:Bloglord>
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84	<ul style="list-style-type: none"> • A cap.gif⁵⁹⁰: Bloglord⁵⁹¹ • derivative work: JK+ontic⁵⁹² (talk⁵⁹³) <ul style="list-style-type: none"> • A cap.gif⁵⁹⁴: Bloglord⁵⁹⁵ • derivative work: JK+ontic⁵⁹⁶ (talk⁵⁹⁷) 	PD
85	<ul style="list-style-type: none"> • A cap.gif⁵⁹⁸: Bloglord⁵⁹⁹ • derivative work: JK+ontic⁶⁰⁰ (talk⁶⁰¹) <ul style="list-style-type: none"> • A cap.gif⁶⁰²: Bloglord⁶⁰³ • derivative work: JK+ontic⁶⁰⁴ (talk⁶⁰⁵) 	PD
86	Original uploader was Bloglord ⁶⁰⁶ at en.wikibooks ⁶⁰⁷	
87	<ul style="list-style-type: none"> • A cap.gif⁶⁰⁸: Bloglord⁶⁰⁹ • derivative work: JK+ontic⁶¹⁰ (talk⁶¹¹) <ul style="list-style-type: none"> • A cap.gif⁶¹²: Bloglord⁶¹³ • derivative work: JK+ontic⁶¹⁴ (talk⁶¹⁵) 	PD

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88	<ul style="list-style-type: none"> • A cap.gif⁶¹⁶: Bloglord⁶¹⁷ • derivative work: JK+ontic⁶¹⁸ (talk⁶¹⁹) , • A cap.gif⁶²⁰: Bloglord⁶²¹ • derivative work: JK+ontic⁶²² (talk⁶²³) 	PD
89	<ul style="list-style-type: none"> • A cap.gif⁶²⁴: Bloglord⁶²⁵ • derivative work: JK+ontic⁶²⁶ (talk⁶²⁷) , • A cap.gif⁶²⁸: Bloglord⁶²⁹ • derivative work: JK+ontic⁶³⁰ (talk⁶³¹) 	PD
90	<ul style="list-style-type: none"> • A cap.gif⁶³²: Bloglord⁶³³ • derivative work: JK+ontic⁶³⁴ (talk⁶³⁵) , • A cap.gif⁶³⁶: Bloglord⁶³⁷ • derivative work: JK+ontic⁶³⁸ (talk⁶³⁹) 	PD

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91	<ul style="list-style-type: none"> • A cap.gif⁶⁴⁰: Bloglord⁶⁴¹ • derivative work: JK+ontic⁶⁴² (talk⁶⁴³) <p>,</p> <ul style="list-style-type: none"> • A cap.gif⁶⁴⁴: Bloglord⁶⁴⁵ • derivative work: JK+ontic⁶⁴⁶ (talk⁶⁴⁷) 	PD
92	<ul style="list-style-type: none"> • A cap.gif⁶⁴⁸: Bloglord⁶⁴⁹ • derivative work: JK+ontic⁶⁵⁰ (talk⁶⁵¹) <p>,</p> <ul style="list-style-type: none"> • A cap.gif⁶⁵²: Bloglord⁶⁵³ • derivative work: JK+ontic⁶⁵⁴ (talk⁶⁵⁵) 	PD
93	<ul style="list-style-type: none"> • A cap.gif⁶⁵⁶: Bloglord⁶⁵⁷ • derivative work: JK+ontic⁶⁵⁸ (talk⁶⁵⁹) <p>,</p> <ul style="list-style-type: none"> • A cap.gif⁶⁶⁰: Bloglord⁶⁶¹ • derivative work: JK+ontic⁶⁶² (talk⁶⁶³) 	PD
94	Original uploader was Bloglord ⁶⁶⁴ at en.wikibooks ⁶⁶⁵	

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95	<ul style="list-style-type: none"> • A cap.gif⁶⁶⁶: Bloglord⁶⁶⁷ • derivative work: JK+ontic⁶⁶⁸ (talk⁶⁶⁹) , • A cap.gif⁶⁷⁰: Bloglord⁶⁷¹ • derivative work: JK+ontic⁶⁷² (talk⁶⁷³) 	PD
96	<ul style="list-style-type: none"> • A cap.gif⁶⁷⁴: Bloglord⁶⁷⁵ • derivative work: JK+ontic⁶⁷⁶ (talk⁶⁷⁷) , • A cap.gif⁶⁷⁸: Bloglord⁶⁷⁹ • derivative work: JK+ontic⁶⁸⁰ (talk⁶⁸¹) 	PD
97	<ul style="list-style-type: none"> • A cap.gif⁶⁸²: Bloglord⁶⁸³ • derivative work: JK+ontic⁶⁸⁴ (talk⁶⁸⁵) , • A cap.gif⁶⁸⁶: Bloglord⁶⁸⁷ • derivative work: JK+ontic⁶⁸⁸ (talk⁶⁸⁹) 	PD

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99	<ul style="list-style-type: none"> ● A cap.gif⁶⁹⁸: Bloglord⁶⁹⁹ ● derivative work: JK+ontic⁷⁰⁰ (talk⁷⁰¹) ● A cap.gif⁷⁰²: Bloglord⁷⁰³ ● derivative work: JK+ontic⁷⁰⁴ (talk⁷⁰⁵) 	PD
100	<ul style="list-style-type: none"> ● A cap.gif⁷⁰⁶: Bloglord⁷⁰⁷ ● derivative work: JK+ontic⁷⁰⁸ (talk⁷⁰⁹) ● A cap.gif⁷¹⁰: Bloglord⁷¹¹ ● derivative work: JK+ontic⁷¹² (talk⁷¹³) 	PD

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102	<ul style="list-style-type: none"> • A cap.gif⁷²²: Bloglord⁷²³ • derivative work: JK+ontic⁷²⁴ (talk⁷²⁵) , • A cap.gif⁷²⁶: Bloglord⁷²⁷ • derivative work: JK+ontic⁷²⁸ (talk⁷²⁹) 	PD
103	<ul style="list-style-type: none"> • A cap.gif⁷³⁰: Bloglord⁷³¹ • derivative work: JK+ontic⁷³² (talk⁷³³) , • A cap.gif⁷³⁴: Bloglord⁷³⁵ • derivative work: JK+ontic⁷³⁶ (talk⁷³⁷) 	PD

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104	<ul style="list-style-type: none"> ● A cap.gif⁷³⁸: Bloglord⁷³⁹ ● derivative work: JK+ontic⁷⁴⁰ (talk⁷⁴¹) ● A cap.gif⁷⁴²: Bloglord⁷⁴³ ● derivative work: JK+ontic⁷⁴⁴ (talk⁷⁴⁵) 	PD
105	<ul style="list-style-type: none"> ● A cap.gif⁷⁴⁶: Bloglord⁷⁴⁷ ● derivative work: JK+ontic⁷⁴⁸ (talk⁷⁴⁹) ● A cap.gif⁷⁵⁰: Bloglord⁷⁵¹ ● derivative work: JK+ontic⁷⁵² (talk⁷⁵³) 	PD
106	<ul style="list-style-type: none"> ● A cap.gif⁷⁵⁴: Bloglord⁷⁵⁵ ● derivative work: JK+ontic⁷⁵⁶ (talk⁷⁵⁷) ● A cap.gif⁷⁵⁸: Bloglord⁷⁵⁹ ● derivative work: JK+ontic⁷⁶⁰ (talk⁷⁶¹) 	PD

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108	<ul style="list-style-type: none"> • A cap.gif⁷⁷⁰: Bloglord⁷⁷¹ • derivative work: JK+ontic⁷⁷² (talk⁷⁷³) , • A cap.gif⁷⁷⁴: Bloglord⁷⁷⁵ • derivative work: JK+ontic⁷⁷⁶ (talk⁷⁷⁷) 	PD
109	<ul style="list-style-type: none"> • A cap.gif⁷⁷⁸: Bloglord⁷⁷⁹ • derivative work: JK+ontic⁷⁸⁰ (talk⁷⁸¹) , • A cap.gif⁷⁸²: Bloglord⁷⁸³ • derivative work: JK+ontic⁷⁸⁴ (talk⁷⁸⁵) 	PD
110	Original uploader was Bloglord ⁷⁸⁶ at en.wikibooks ⁷⁸⁷	

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111	<ul style="list-style-type: none"> ● A cap.gif⁷⁸⁸: Bloglord⁷⁸⁹ ● derivative work: JK+ontic⁷⁹⁰ (talk⁷⁹¹) ● A cap.gif⁷⁹²: Bloglord⁷⁹³ ● derivative work: JK+ontic⁷⁹⁴ (talk⁷⁹⁵) 	PD
112	<ul style="list-style-type: none"> ● A cap.gif⁷⁹⁶: Bloglord⁷⁹⁷ ● derivative work: JK+ontic⁷⁹⁸ (talk⁷⁹⁹) ● A cap.gif⁸⁰⁰: Bloglord⁸⁰¹ ● derivative work: JK+ontic⁸⁰² (talk⁸⁰³) 	PD
113	<ul style="list-style-type: none"> ● A cap.gif⁸⁰⁴: Bloglord⁸⁰⁵ ● derivative work: JK+ontic⁸⁰⁶ (talk⁸⁰⁷) ● A cap.gif⁸⁰⁸: Bloglord⁸⁰⁹ ● derivative work: JK+ontic⁸¹⁰ (talk⁸¹¹) 	PD

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 807 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 808 https://commons.wikimedia.org/wiki/File:A_cap.gif
 809 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 810 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 811 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

114	<ul style="list-style-type: none"> • A cap.gif⁸¹²: Bloglord⁸¹³ • derivative work: JK+ontic⁸¹⁴ (talk⁸¹⁵) , • A cap.gif⁸¹⁶: Bloglord⁸¹⁷ • derivative work: JK+ontic⁸¹⁸ (talk⁸¹⁹) 	PD
115	Original uploader was Bloglord ⁸²⁰ at en.wikibooks ⁸²¹	
116	Original uploader was Bloglord ⁸²² at en.wikibooks ⁸²³	
117	Original uploader was Bloglord ⁸²⁴ at en.wikibooks ⁸²⁵	
118	Original uploader was Bloglord ⁸²⁶ at en.wikibooks ⁸²⁷	
119	<ul style="list-style-type: none"> • A cap.gif⁸²⁸: Bloglord⁸²⁹ • derivative work: JK+ontic⁸³⁰ (talk⁸³¹) , • A cap.gif⁸³²: Bloglord⁸³³ • derivative work: JK+ontic⁸³⁴ (talk⁸³⁵) 	PD

812 http://commons.wikimedia.org/wiki/File:A_cap.gif
 813 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 814 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 815 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 816 https://commons.wikimedia.org/wiki/File:A_cap.gif
 817 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 818 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 819 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 820 <http://en.wikibooks.org/wiki/en:User:Bloglord>
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 827 <http://en.wikibooks.org>
 828 http://commons.wikimedia.org/wiki/File:A_cap.gif
 829 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 830 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 831 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 832 https://commons.wikimedia.org/wiki/File:A_cap.gif
 833 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 834 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 835 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

120	<ul style="list-style-type: none"> ● A cap.gif⁸³⁶: Bloglord⁸³⁷ ● derivative work: JK+ontic⁸³⁸ (talk⁸³⁹) ● A cap.gif⁸⁴⁰: Bloglord⁸⁴¹ ● derivative work: JK+ontic⁸⁴² (talk⁸⁴³) 	PD
121	Original uploader was Bloglord ⁸⁴⁴ at en.wikibooks ⁸⁴⁵	
122	Nandhp ⁸⁴⁶ , Nandhp ⁸⁴⁷	
123	Nandhp ⁸⁴⁸ , Nandhp ⁸⁴⁹	
124	Nandhp ⁸⁵⁰ , Nandhp ⁸⁵¹	
125	Original uploader was Bloglord ⁸⁵² at en.wikibooks ⁸⁵³	
126	<ul style="list-style-type: none"> ● A cap.gif⁸⁵⁴: Bloglord⁸⁵⁵ ● derivative work: JK+ontic⁸⁵⁶ (talk⁸⁵⁷) ● A cap.gif⁸⁵⁸: Bloglord⁸⁵⁹ ● derivative work: JK+ontic⁸⁶⁰ (talk⁸⁶¹) 	PD

- 836 http://commons.wikimedia.org/wiki/File:A_cap.gif
 837 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 838 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 839 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 840 https://commons.wikimedia.org/wiki/File:A_cap.gif
 841 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 842 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 843 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 844 <http://en.wikibooks.org/wiki/en:User:Bloglord>
 845 <http://en.wikibooks.org>
 846 <http://commons.wikimedia.org/wiki/User:Nandhp>
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 857 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 858 https://commons.wikimedia.org/wiki/File:A_cap.gif
 859 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 860 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 861 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

127	<ul style="list-style-type: none"> • A cap.gif⁸⁶²: Bloglord⁸⁶³ • derivative work: JK+ontic⁸⁶⁴ (talk⁸⁶⁵) , • A cap.gif⁸⁶⁶: Bloglord⁸⁶⁷ • derivative work: JK+ontic⁸⁶⁸ (talk⁸⁶⁹) 	PD
128	<ul style="list-style-type: none"> • A cap.gif⁸⁷⁰: Bloglord⁸⁷¹ • derivative work: JK+ontic⁸⁷² (talk⁸⁷³) , • A cap.gif⁸⁷⁴: Bloglord⁸⁷⁵ • derivative work: JK+ontic⁸⁷⁶ (talk⁸⁷⁷) 	PD
129	<ul style="list-style-type: none"> • A cap.gif⁸⁷⁸: Bloglord⁸⁷⁹ • derivative work: JK+ontic⁸⁸⁰ (talk⁸⁸¹) , • A cap.gif⁸⁸²: Bloglord⁸⁸³ • derivative work: JK+ontic⁸⁸⁴ (talk⁸⁸⁵) 	PD

862 http://commons.wikimedia.org/wiki/File:A_cap.gif

863 <http://en.wikipedia.org/wiki/en:User:Bloglord>

864 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

865 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

866 https://commons.wikimedia.org/wiki/File:A_cap.gif

867 <http://en.wikipedia.org/wiki/en:User:Bloglord>

868 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

869 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

870 http://commons.wikimedia.org/wiki/File:A_cap.gif

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872 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

873 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

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877 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

878 http://commons.wikimedia.org/wiki/File:A_cap.gif

879 <http://en.wikipedia.org/wiki/en:User:Bloglord>

880 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>

881 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

882 https://commons.wikimedia.org/wiki/File:A_cap.gif

883 <http://en.wikipedia.org/wiki/en:User:Bloglord>

884 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>

885 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

130	<ul style="list-style-type: none"> • A cap.gif⁸⁸⁶: Bloglord⁸⁸⁷ • derivative work: JK+ontic⁸⁸⁸ (talk⁸⁸⁹) , • A cap.gif⁸⁹⁰: Bloglord⁸⁹¹ • derivative work: JK+ontic⁸⁹² (talk⁸⁹³) 	PD
131	<ul style="list-style-type: none"> • A cap.gif⁸⁹⁴: Bloglord⁸⁹⁵ • derivative work: JK+ontic⁸⁹⁶ (talk⁸⁹⁷) , • A cap.gif⁸⁹⁸: Bloglord⁸⁹⁹ • derivative work: JK+ontic⁹⁰⁰ (talk⁹⁰¹) 	PD
132	Original uploader was Bloglord ⁹⁰² at en.wikibooks ⁹⁰³	
133	Original uploader was Bloglord ⁹⁰⁴ at en.wikibooks ⁹⁰⁵	
134	<ul style="list-style-type: none"> • A cap.gif⁹⁰⁶: Bloglord⁹⁰⁷ • derivative work: JK+ontic⁹⁰⁸ (talk⁹⁰⁹) , • A cap.gif⁹¹⁰: Bloglord⁹¹¹ • derivative work: JK+ontic⁹¹² (talk⁹¹³) 	PD

- 886 http://commons.wikimedia.org/wiki/File:A_cap.gif
 887 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 888 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
 889 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 890 https://commons.wikimedia.org/wiki/File:A_cap.gif
 891 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 892 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 893 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 894 http://commons.wikimedia.org/wiki/File:A_cap.gif
 895 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 896 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>
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 906 http://commons.wikimedia.org/wiki/File:A_cap.gif
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 910 https://commons.wikimedia.org/wiki/File:A_cap.gif
 911 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 912 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 913 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

135	<ul style="list-style-type: none"> • A cap.gif⁹¹⁴: Bloglord⁹¹⁵ • derivative work: JK+ontic⁹¹⁶ (talk⁹¹⁷) • A cap.gif⁹¹⁸: Bloglord⁹¹⁹ • derivative work: JK+ontic⁹²⁰ (talk⁹²¹) 	PD
136	<ul style="list-style-type: none"> • A cap.gif⁹²²: Bloglord⁹²³ • derivative work: JK+ontic⁹²⁴ (talk⁹²⁵) • A cap.gif⁹²⁶: Bloglord⁹²⁷ • derivative work: JK+ontic⁹²⁸ (talk⁹²⁹) 	PD
137	<ul style="list-style-type: none"> • A cap.gif⁹³⁰: Bloglord⁹³¹ • derivative work: JK+ontic⁹³² (talk⁹³³) • A cap.gif⁹³⁴: Bloglord⁹³⁵ • derivative work: JK+ontic⁹³⁶ (talk⁹³⁷) 	PD

914 http://commons.wikimedia.org/wiki/File:A_cap.gif
 915 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 921 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic
 922 http://commons.wikimedia.org/wiki/File:A_cap.gif
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 926 https://commons.wikimedia.org/wiki/File:A_cap.gif
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 930 http://commons.wikimedia.org/wiki/File:A_cap.gif
 931 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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 934 https://commons.wikimedia.org/wiki/File:A_cap.gif
 935 <http://en.wikipedia.org/wiki/en:User:Bloglord>
 936 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>
 937 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic

138	<ul style="list-style-type: none"> • A cap.gif⁹³⁸: Bloglord⁹³⁹ • derivative work: JK+ontic⁹⁴⁰ (talk⁹⁴¹) <ul style="list-style-type: none"> • A cap.gif⁹⁴²: Bloglord⁹⁴³ • derivative work: JK+ontic⁹⁴⁴ (talk⁹⁴⁵) 	PD
139	<ul style="list-style-type: none"> • A cap.gif⁹⁴⁶: Bloglord⁹⁴⁷ • derivative work: JK+ontic⁹⁴⁸ (talk⁹⁴⁹) <ul style="list-style-type: none"> • A cap.gif⁹⁵⁰: Bloglord⁹⁵¹ • derivative work: JK+ontic⁹⁵² (talk⁹⁵³) 	PD
140	Original uploader was Bloglord ⁹⁵⁴ at en.wikibooks ⁹⁵⁵	
141	<ul style="list-style-type: none"> • A cap.gif⁹⁵⁶: Bloglord⁹⁵⁷ • derivative work: JK+ontic⁹⁵⁸ (talk⁹⁵⁹) <ul style="list-style-type: none"> • A cap.gif⁹⁶⁰: Bloglord⁹⁶¹ • derivative work: JK+ontic⁹⁶² (talk⁹⁶³) 	PD
142	Original uploader was Bloglord ⁹⁶⁴ at en.wikibooks ⁹⁶⁵	
143	Original uploader was Bloglord ⁹⁶⁶ at en.wikibooks ⁹⁶⁷	

938 http://commons.wikimedia.org/wiki/File:A_cap.gif
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144	<ul style="list-style-type: none"> • A cap.gif⁹⁶⁸: Bloglord⁹⁶⁹ • derivative work: JK+ontic⁹⁷⁰ (talk⁹⁷¹) , • A cap.gif⁹⁷²: Bloglord⁹⁷³ • derivative work: JK+ontic⁹⁷⁴ (talk⁹⁷⁵) 	PD
145	<ul style="list-style-type: none"> • A cap.gif⁹⁷⁶: Bloglord⁹⁷⁷ • derivative work: JK+ontic⁹⁷⁸ (talk⁹⁷⁹) , • A cap.gif⁹⁸⁰: Bloglord⁹⁸¹ • derivative work: JK+ontic⁹⁸² (talk⁹⁸³) 	PD
146	<ul style="list-style-type: none"> • A cap.gif⁹⁸⁴: Bloglord⁹⁸⁵ • derivative work: JK+ontic⁹⁸⁶ (talk⁹⁸⁷) , • A cap.gif⁹⁸⁸: Bloglord⁹⁸⁹ • derivative work: JK+ontic⁹⁹⁰ (talk⁹⁹¹) 	PD
147	Original uploader was Bloglord ⁹⁹² at en.wikibooks ⁹⁹³	
148	Original uploader was Bloglord ⁹⁹⁴ at en.wikibooks ⁹⁹⁵	

968 http://commons.wikimedia.org/wiki/File:A_cap.gif969 <http://en.wikipedia.org/wiki/en:User:Bloglord>970 <http://commons.wikimedia.org/wiki/User:JK%2Bontic>971 http://commons.wikimedia.org/wiki/User_talk:JK%2Bontic972 https://commons.wikimedia.org/wiki/File:A_cap.gif973 <http://en.wikipedia.org/wiki/en:User:Bloglord>974 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>975 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic976 http://commons.wikimedia.org/wiki/File:A_cap.gif977 <http://en.wikipedia.org/wiki/en:User:Bloglord>978 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>979 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic980 https://commons.wikimedia.org/wiki/File:A_cap.gif981 <http://en.wikipedia.org/wiki/en:User:Bloglord>982 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>983 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic984 http://commons.wikimedia.org/wiki/File:A_cap.gif985 <http://en.wikipedia.org/wiki/en:User:Bloglord>986 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>987 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic988 https://commons.wikimedia.org/wiki/File:A_cap.gif989 <http://en.wikipedia.org/wiki/en:User:Bloglord>990 <https://commons.wikimedia.org/wiki/User:JK%2Bontic>991 https://commons.wikimedia.org/wiki/User_talk:JK%2Bontic992 <http://en.wikibooks.org/wiki/en:User:Bloglord>993 <http://en.wikibooks.org>994 <http://en.wikibooks.org/wiki/en:User:Bloglord>995 <http://en.wikibooks.org>

149	<ul style="list-style-type: none"> • A cap.gif⁹⁹⁶: Bloglord⁹⁹⁷ • derivative work: JK+ontic⁹⁹⁸ (talk⁹⁹⁹) , • A cap.gif¹⁰⁰⁰: Bloglord¹⁰⁰¹ • derivative work: JK+ontic¹⁰⁰² (talk¹⁰⁰³) 	PD
150	<ul style="list-style-type: none"> • A cap.gif¹⁰⁰⁴: Bloglord¹⁰⁰⁵ • derivative work: JK+ontic¹⁰⁰⁶ (talk¹⁰⁰⁷) , • A cap.gif¹⁰⁰⁸: Bloglord¹⁰⁰⁹ • derivative work: JK+ontic¹⁰¹⁰ (talk¹⁰¹¹) 	PD
151	<ul style="list-style-type: none"> • A cap.gif¹⁰¹²: Bloglord¹⁰¹³ • derivative work: JK+ontic¹⁰¹⁴ (talk¹⁰¹⁵) , • A cap.gif¹⁰¹⁶: Bloglord¹⁰¹⁷ • derivative work: JK+ontic¹⁰¹⁸ (talk¹⁰¹⁹) 	PD

996 http://commons.wikimedia.org/wiki/File:A_cap.gif
 997 <http://en.wikipedia.org/wiki/en:User:Bloglord>
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152	<ul style="list-style-type: none"> • A cap.gif¹⁰²⁰: Bloglord¹⁰²¹ • derivative work: JK+ontic¹⁰²² (talk¹⁰²³) , • A cap.gif¹⁰²⁴: Bloglord¹⁰²⁵ • derivative work: JK+ontic¹⁰²⁶ (talk¹⁰²⁷) 	PD
153	<ul style="list-style-type: none"> • A cap.gif¹⁰²⁸: Bloglord¹⁰²⁹ • derivative work: JK+ontic¹⁰³⁰ (talk¹⁰³¹) , • A cap.gif¹⁰³²: Bloglord¹⁰³³ • derivative work: JK+ontic¹⁰³⁴ (talk¹⁰³⁵) 	PD
154	<ul style="list-style-type: none"> • A cap.gif¹⁰³⁶: Bloglord¹⁰³⁷ • derivative work: JK+ontic¹⁰³⁸ (talk¹⁰³⁹) , • A cap.gif¹⁰⁴⁰: Bloglord¹⁰⁴¹ • derivative work: JK+ontic¹⁰⁴² (talk¹⁰⁴³) 	PD

1020 http://commons.wikimedia.org/wiki/File:A_cap.gif
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Version 3, 29 June 2007

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