

# Evalued

## Evaluating Electronic Library Services

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## Evaluated Evaluating electronic library services

### **A Summary Booklet**

#### **Part 1- About evaluated**

The evaluated toolkit was first launched in summer 2004. This booklet accompanies the updated version of the toolkit which was launched in spring 2006. The evaluated toolkit is designed to support library and information services staff in Higher Education Institutions (HEIs) in the evaluation of electronic information services (EIS). The toolkit takes a user-focused approach to the evaluation of EIS mainly through the use of qualitative data collection methods.

The evaluated toolkit was developed by a research team from evidence base research and evaluation services, based in Library Services at the University of Central England. The development has been funded by the Higher Education Funding Council for England (HEFCE) through its Fund for Good Management Practice.

The toolkit development was preceded by a research phase which included the following elements:

- a survey to all UK HEIs to establish their level of evaluation of EIS
- follow-up interviews with a selection of respondents to the survey
- interviews with experts in the field of evaluation generally and EIS specifically
- a review of the literature and related projects.
- test bed work at the University of Central England and the University of Derby.

This summary provides a general overview of the evaluation process, followed by specific advice relating to the themes which provide the structure for the evaluated toolkit.

Further information and practical resources such as data collection tools are available at: <http://www.evalued.uce.ac.uk>.

## **Part 2- Overview of the evaluation process**

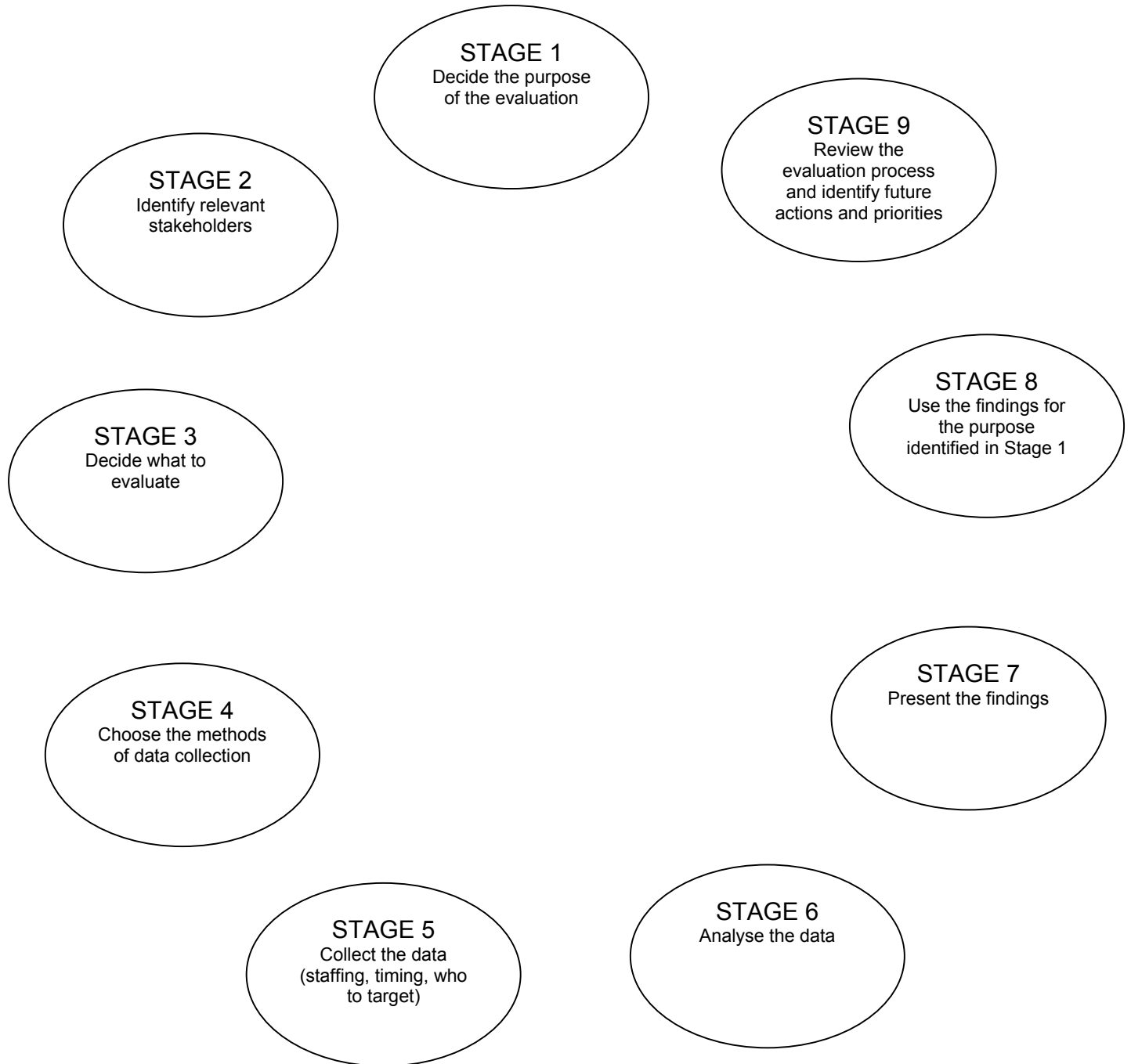
Evaluating EIS is an essential part of the library planning cycle for a number of reasons, including:

- helping to ensure that strategic and operational objectives are met
- identifying and celebrating successes
- identifying problems and weakness so they can be rectified
- providing information to aid further development
- providing evidence of the benefits and impacts of EIS
- contributing to securing funding for further EIS development
- identifying staff training and development needs
- gaining the support of institutional managers
- guiding future plans
- providing information for stakeholders eg managers, funders, users
- developing guidelines which may be useful for other library and information services
- devising strategies to develop projects into services
- positioning the library in relation to current learning and research environment.

The evaluation process is therefore likely to be driven by a number of forces, for example:

- institutional or library and information service strategic and financial planning
- user needs
- institutional requirements and constraints in terms of evaluation
- library and information service targets
- funders' requirements
- inspection requirements (eg QAA).

In order to be effective, evaluation needs to be embedded within the culture of the library and information service and its workforce. The diagram below outlines the evaluation process:



## Stage 1: Decide the purpose of the evaluation

The first stage of any evaluation is to clarify the purpose, to answer the question, "Why are you evaluating?" The main reasons for carrying out an evaluation are set out in the table below:

Reason	Example
<b>Strategic planning</b>	Assessing to what extent the goals of the library and EIS support institutional aims Aligning EIS outcomes with the mission statement of library and information services
<b>Managing EIS in a day-to-day basis</b>	Monitoring usage Improving working practices / efficiency Providing justification for internal budget decisions Enabling benchmarking with other HEIs Investigating weaknesses / problems Providing MIS data for management control Communicating with other managers
<b>Exploring:</b> problem solving and investigating uses and impact of EIS	Investigating how EIS are being used in general terms Exploring how specific EIS services / collections are being used Discovering what impact EIS is having on learning and teaching Investigating the extent to which users are satisfied with the EIS
<b>Improving services and developing EIS</b>	Introducing a new service or collection Changing existing services Developing staff skills
<b>Justifying:</b> accountability to funders and external bodies	Accountability to internal and external funders eg HEFCE, JISC Reporting to institutional managers and departments Providing data for professional organisations e.g.SCONUL, QAA Public relations purposes

## Stage 2: Identify relevant stakeholders

Once the purpose of the evaluation has been clarified, the next stage is to identify all relevant stakeholders. Stakeholders may be the people who:

- wish the evaluation to be carried out
- wish to be, or would benefit from being, informed of the findings
- participate in the evaluation as evaluators or subjects.

Each group of stakeholders is likely to be interested in different issues. The main stakeholders involved in the evaluation of EIS are listed below, along with just a few examples of their typical concerns.

Stakeholder	Examples of concerns
Library managers	How should EIS develop in the future? How can funding allocations (and future bids) be justified? How does our service compare with that offered by other institutions? Can links between the library and other parts of the institution be improved?
Library staff	How can working practices be improved? How can users' needs be met more effectively? What skills do staff need to develop?
Institutional managers	Is the library operating as efficiently as possible? What impact does EIS have on teaching, learning and research? How can the library contribute to institutional aims and goals?
Student users	How can EIS help with my learning? Can I use the resources at suitable times and locations? What changes would improve EIS so that it meets my needs more effectively?
Funders eg JISC, funding councils, government	Does the service/project offer value for money? Are services and practices transferable to other institutions?
Professional organisations Eg SCONUL, QAA	What impact is EIS having? How does the level of provision vary between different institutions?
Academic staff users	How can EIS contribute to teaching, learning and research? Can links between the library and academic departments be improved?

Researchers (staff and postgraduates)	What impact does EIS have on research practices? How can EIS help with my research?
IT staff	How can working practices be improved? Can links between the library/EIS and IT services be improved? What skills do staff need to develop?
Vendors and publishers	How is EIS used? What new services/resources should be developed?
The wider academic community	What impact does EIS have on teaching, learning and research? Can information and good practice be shared more effectively?

### Stage 3: Decide what to evaluate

Once the purpose of the evaluation has been clarified and key stakeholders identified, the next step is to decide exactly what needs to be evaluated.

The evaluated toolkit has four main evaluation themes:

- User experience
- Planning
- Management
- Impact

These are described in more detail in Part 3 of this booklet.

### Stage 4: Choose the data collection methods and tools

The choice of data collection method will depend on a number of factors, including:

- staff workloads
- time available and time required for data collection and analysis
- cost and financial resources available
- appropriateness to the topic being evaluated
- skills required and staff skills available
- degree of user involvement required
- commitment of staff (ie what other roles they are required to perform)
- technological expertise required.

Common methods of data collection include:

- questionnaires/surveys
- focus groups
- interviews
- statistical data collected electronically by vendor or locally
- statistical data collected manually eg enquiry logs
- document analysis
- IT performance monitoring
- observation/usability studies
- case studies
- mystery shopper exercises.

The following sections offer further advice on particular methods.

#### **a. Questionnaires**

Questionnaires are a useful method to investigate:

- patterns, frequency, ease and success of EIS use
- user needs, expectations, perspectives, priorities and preferences
- user satisfaction with collections and services
- shifts in user attitudes and opinions
- relevance of collections and services to user needs
- trends (by repetition over time).

Advantages of questionnaires	Disadvantages of questionnaires
<ul style="list-style-type: none"> <li>• they can be used for sensitive topics which users may feel uncomfortable speaking to an interviewer about</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• if you forget to ask a question, you cannot usually go back to respondents, especially if they are anonymous</li> </ul>
<ul style="list-style-type: none"> <li>• they are familiar to library and information service staff and managers</li> </ul>	<ul style="list-style-type: none"> <li>• it is sometimes difficult to obtain a sufficient number of responses, especially from postal questionnaires</li> </ul>
<ul style="list-style-type: none"> <li>• a large sample can be contacted at relatively low cost</li> </ul>	<ul style="list-style-type: none"> <li>• respondents may ignore certain questions</li> </ul>
<ul style="list-style-type: none"> <li>• they are simple to administer</li> </ul>	<ul style="list-style-type: none"> <li>• they may appear impersonal</li> </ul>
<ul style="list-style-type: none"> <li>• the format is familiar to most respondents</li> </ul>	<ul style="list-style-type: none"> <li>• they may be incorrectly completed</li> </ul>
<ul style="list-style-type: none"> <li>• if well designed they are simple and quick for the respondent to complete</li> </ul>	<ul style="list-style-type: none"> <li>• those who have an interest in the subject may be more likely to respond, skewing the sample</li> </ul>
<ul style="list-style-type: none"> <li>• information is collected in a standardised way</li> </ul>	<ul style="list-style-type: none"> <li>• they are not suitable to investigate long, complex issues</li> </ul>
<ul style="list-style-type: none"> <li>• they are usually relatively easy to analyse</li> </ul>	<ul style="list-style-type: none"> <li>• respondents may misunderstand questions</li> </ul>
<ul style="list-style-type: none"> <li>• respondents have time to think about their answers; they are not usually required to reply immediately.</li> </ul>	<ul style="list-style-type: none"> <li>• questionnaires are unsuitable for some kinds of respondents, e.g. visually impaired students unless special provision is arranged</li> </ul>
	<ul style="list-style-type: none"> <li>• there is the danger of questionnaire fatigue if surveys are carried out too frequently</li> </ul>
	<ul style="list-style-type: none"> <li>• they may require follow up research to investigate issues in greater depth and identify ways to solve problems highlighted.</li> </ul>

## How to design a questionnaire

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### **1. Determine what information is required.**

What do you want to find out? Some surveys are carried out as a matter of routine eg an annual user survey; others take place on a one-off basis and these often focus on a particular service or topic.

### **2. Decide on the audience for the questionnaire.**

The questionnaire might be aimed at students, library and information service staff or academic staff. You may want to target a particular group of users eg part-time students, first year students, staff from a particular department. In other cases, you may choose to select a random sample from a list of staff or students or simply hand out questionnaires in the library and information service or elsewhere.

### **3. Decide on the method of data collection**

Each method has its own advantages and disadvantages as illustrated in the table below.

Criteria	Postal	Telephone	Electronic	Personally administered
Low cost	✓		✓	
High speed		✓	✓	
Detailed questions		✓		✓
Anonymity	✓		✓	
Rapport with respondents		✓		✓
Little staff time required	✓		✓	
High response rate		✓		✓

### **4. Draft the questionnaire**

The following checklist will help you to consider the content, wording, format, structure and layout.

- Can the questions be easily understood?
- Are any questions either too vague or too precise?
- Are any questions biased?
- Is each question necessary to the evaluation? Will respondents be willing to provide the information?

- Is each question applicable to all respondents?
- Will the terms used be easily understood by all respondents?
- Is the layout consistent?
- Is there sufficient 'white space'?
- Is there variety in terms of the style of questions eg open, closed, scaled?
- Is there enough space for respondents to write their answers?
- Have you clearly differentiated between instructions to the respondent and the questions themselves, by using different type styles for instance?

### **5. Pilot/test the questionnaire**

This might be done with colleagues or a sample of potential respondents and the questionnaire revised as a result.

### **6. Plan the timing of the questionnaire**

For example, avoid times such as vacations and exam periods if targeting students.

### **7. Distribute the questionnaire**

- Include information setting out the purpose of the questionnaire.
- Give clear instructions for returning completed questionnaires.
- Show a 'return by' date so the respondents know how much time they have.
- Ensure that the questionnaire is self-explanatory and stands alone.

### **8. Chase non-respondents**

Ways to maximise your response rate include:

- providing rewards for respondents
- providing a reply-paid envelope.
- making sure the questionnaire is not too time-consuming to complete.
- using an easy response format if possible eg checkboxes.
- reassuring respondents that their responses will be treated in confidence (possibly anonymously).
- sending a reminder to non-respondents if possible.

### **9. Analyse the responses**

The method of analysis will depend on the focus of the questionnaire, the way in which you plan to use the data and the types of questions. The archive tools section of the evaluated toolkit provides analysis frameworks for standard questionnaires. See page?? for further details

## **10 Write up, present and use the findings**

See pages 19-20 for further details.

### **b. Focus groups**

Focus groups are a useful method to:

- identify changes in behaviour
- investigate complex behaviour
- discover how different groups think and feel about a topic and why they hold certain opinions
- investigate the use, effectiveness and usefulness of particular library collections and services
- verify or clarify the results from surveys
- suggest potential solutions to problems identified
- inform decision-making, strategic planning and resource allocation
- add a human dimension to impersonal data
- deepen understanding and explain statistical data.

<b>Advantages of focus groups</b>	<b>Disadvantages of focus groups</b>
<ul style="list-style-type: none"><li>• they are useful to obtain detailed information about personal and group feelings, perceptions and opinions</li></ul>	<ul style="list-style-type: none"><li>• there can be disagreements and irrelevant discussion which distract from the main focus</li></ul>
<ul style="list-style-type: none"><li>• they can save time and money compared to individual interviews</li></ul>	<ul style="list-style-type: none"><li>• they can be hard to control and manage</li></ul>
<ul style="list-style-type: none"><li>• they can provide a broader range of information</li></ul>	<ul style="list-style-type: none"><li>• they can be tricky to analyse</li></ul>
<ul style="list-style-type: none"><li>• they offer the opportunities to seek clarification</li></ul>	<ul style="list-style-type: none"><li>• it can be difficult to encourage a range of people to participate</li></ul>
<ul style="list-style-type: none"><li>• they may provide a human dimension which can be valuable eg quotes for public relations publication and presentations</li></ul>	<ul style="list-style-type: none"><li>• some participants may find a focus group situation intimidating or off-putting and feel under pressure to agree with the dominant view</li></ul>
	<ul style="list-style-type: none"><li>• as they are self-selecting, focus groups may not be representative of groups such as non-users</li></ul>

## **Tips on how to run a focus groups**

Most focus groups consist of between six and twelve participants. Ways to recruit participants include email, posters and flyers. Tutors may be useful to help to recruit students. Invitations should describe:

- the purpose of the focus groups
- the participants' role and what is expected of them
- how long the focus groups will last
- any rewards which will be provided.

A focus group should typically last between one and two hours. Make sure the questions can be discussed in the allotted time. Consider the best order of questions to ensure the flow of conversation.

In the introduction, the evaluator should:

- confirm that anonymity will be preserved
- describe the ground rules
- reiterate the purpose of the research.

Focus groups are best carried out by a pair of evaluators, one to facilitate the group and the other to record responses, themes, enthusiasm, body language, mood of discussion etc. Evaluators should keep the discussion moving and be prepared to ask probing follow-up questions suggested by the participants' responses. They should also keep the discussion focused on the topic being investigated while attempting to bring everyone into the conversation. Record focus groups if possible.

### c. Interviews

Interviews have many of the advantages of focus groups. In addition they are useful to investigate sensitive topics which people may feel uncomfortable discussing in a focus group.

Advantages of interviews	Disadvantages of interviews
<ul style="list-style-type: none"> <li>they are useful to obtain detailed information about personal feelings, perceptions and opinions</li> </ul>	<ul style="list-style-type: none"> <li>they can be very time-consuming: setting up, interviewing, transcribing, analysing, feedback, reporting</li> </ul>
<ul style="list-style-type: none"> <li>they allow more detailed questions to be asked</li> </ul>	<ul style="list-style-type: none"> <li>they can be costly</li> </ul>
<ul style="list-style-type: none"> <li>they usually achieve a high response rate</li> </ul>	<ul style="list-style-type: none"> <li>different interviewers may understand and transcribe interviews in different ways.</li> </ul>
<ul style="list-style-type: none"> <li>the respondents' own words are recorded</li> </ul>	
<ul style="list-style-type: none"> <li>ambiguities can be clarified and incomplete answers followed up</li> </ul>	
<ul style="list-style-type: none"> <li>precise wording can be tailored to respondent and precise meaning of questions clarified (eg for students with English as a Second Language)</li> </ul>	
<ul style="list-style-type: none"> <li>interviewees are not influenced by others in the group</li> </ul>	
<ul style="list-style-type: none"> <li>some interviewees may be less self-conscious in a one-to-one situation</li> </ul>	

#### d. Statistics

Statistics are a useful method to investigate:

- usage patterns
- access patterns
- resource provision
- tracking trends and changes (by repetition over time)
- performance of services
- financial management.

Advantages of statistics	Disadvantages of statistics
<ul style="list-style-type: none"> <li>• they are familiar to library and information service staff and managers</li> </ul>	<ul style="list-style-type: none"> <li>• they are not an appropriate method to understand issues in great depth and identify ways to solve problems highlighted</li> </ul>
<ul style="list-style-type: none"> <li>• they can be analysed relatively quickly</li> </ul>	<ul style="list-style-type: none"> <li>• they are not suitable to evaluate user opinions, needs or satisfaction with services</li> </ul>
<ul style="list-style-type: none"> <li>• information is collected in a standardised way</li> </ul>	<ul style="list-style-type: none"> <li>• it may be time-consuming to arrange methods of data collection eg contacting vendors, liaising with IT departments</li> </ul>
<ul style="list-style-type: none"> <li>• they overcome the difficulties of encouraging participation by users</li> </ul>	<ul style="list-style-type: none"> <li>• the statistics provided from different sources, eg by different vendors, may not be comparable</li> </ul>
<ul style="list-style-type: none"> <li>• they are often required and respected by decision-makers within the institution and beyond eg funders, government</li> </ul>	<ul style="list-style-type: none"> <li>• technical expertise is required</li> </ul>
<ul style="list-style-type: none"> <li>• they support qualitative data obtained from questionnaires, interviews etc with 'hard facts'</li> </ul>	<ul style="list-style-type: none"> <li>• because the field is changing so rapidly, statistics may not be comparable year-on-year</li> </ul>
<ul style="list-style-type: none"> <li>• they are useful for benchmarking purposes.</li> </ul>	

Issues to consider:

- collecting statistics is likely to require technical, as well as general evaluation, expertise
- some statistics are likely to be provided by other departments and services in your institution; you will need to build a good working relationship with departments such as IT, computing, VLE and e-learning
- other statistics are likely to be provided by external bodies eg vendors

#### **e. Document analysis**

Document analysis is a useful method to investigate:

- decision making and strategic planning
- resource allocation
- outcomes alignment and library and information service policy
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<b>Advantages of document analysis</b>	<b>Disadvantages of document analysis</b>
<ul style="list-style-type: none"><li>• it overcomes the difficulties of encouraging participation by users</li></ul>	<ul style="list-style-type: none"><li>• it is not suitable to evaluate user opinions, needs or satisfaction with services</li></ul>
<ul style="list-style-type: none"><li>• there are few costs involved other than staff time.</li></ul>	<ul style="list-style-type: none"><li>• some documents may be sensitive and not publicly available.</li></ul>

### **Stage 5: Plan the data collection and collect the data**

Whatever methods of data collection are chosen, there are a number of practical considerations to bear in mind.

#### ***Staffing issues***

When planning an evaluation, decisions need to be made about:

- Who will co-ordinate the process?
- Who will collect the data?
- Who will analyse the data?
- Who will be responsible for reporting and acting on the findings?

#### ***Time***

If time is an important consideration, choose those methods of data collection which are least time-consuming, for example, questionnaires with predominantly closed or scaled questions. Combining the evaluation of print and electronic resources may make the

best use of time and money. It may be possible to incorporate questions about EIS into a general library and information service survey. Questions about EIS and/or the library service as a whole might also be included in a general institutional survey, such as one measuring student satisfaction. This may reduce the pressure on library and information service staff by drawing on expertise from other departments within the institution.

The factors which affect the timing of an evaluation will depend on the focus of the evaluation and the methods of data collection. In general:

- give first year students time to familiarise themselves with the services before taking part in an evaluation
- avoid times when students are on placements, reading weeks or sitting exams as this may skew results and make it difficult to contact users
- although vacations are not usually suitable times to carry out data collection, they can be used for activities such as planning evaluation and analysing data.

### ***Skills***

The staff skills required will depend, to a large extent, on the focus of the evaluation and the methods of data collection chosen. In order to carry out effective evaluation on an ongoing basis, evaluation activities need to be embedded in the work schedules of relevant library and information service staff. Many services have found the best approach is to appoint a committee which takes overall responsibility for the evaluation of EIS.

If library and information service staff lack the requisite time or skills to carry out an evaluation, one option is to look outside the service for support. Possible sources of support include:

- external consultants
- technical staff
- academic staff eg sociology department
- post-graduate students
- other departments such as student services or quality assurance
- publishers/vendors
- another library and information service
- professional bodies.

### ***Sampling***

For some evaluation activities the whole population may be asked to take part eg all students on a particular course or all library and information service staff. However, on most occasions, it will be necessary to identify a sample to participate in an evaluation. Methods of sampling include:

- targeting the 'key decision makers', for example, student library reps, research committee members, departmental library contacts. However, these may not be representative of the population as a whole
- using supplier data to identify users of a service in given time period and emailing these
- emailing and mailing all staff/students in a department (this will include non-users in the process).
- focusing on particular groups such as distance learners, mature students, part-time staff and students, undergraduates, researchers or those with special needs.

## **Stage 6: Analyse the data**

Once the data has been collected, the next stage is analysis. There are some general points to remember when analysing data.

- Remember to relate the analysis to the purpose of the evaluation. Use the data to help to answer the key questions.
- Combine qualitative and quantitative data and use the two types of data to support each other.
- Compare findings from different sources eg how does the 'official' view in documentation compare to what actually happens in practice as determined by interviews with stakeholders or analysis of statistics?
- Make comparisons between the views of different stakeholders eg library and information service staff, students, academic staff.
- Identify any gaps in the data or questions which cannot be answered. This might suggest the need for further investigation.
- Try not to anticipate findings and take care not to miss unexpected results.
- Do not worry if the findings identify negative aspects of service provision. This information can be useful to find ways to improve services.
- Try to involve at least two people in the data analysis, one who has been involved in the data collection process, and another who is more detached from the process and can bring 'a fresh pair of eyes' to the data.
- Consider how the data will be presented to its intended audience; this will help to determine how detailed the analysis should be for example.

## **Stage 7: Present the findings**

Evaluation findings and recommendations should be reported to all those stakeholders identified in Stage 2.

The method of dissemination will depend, to some extent, on the focus of the evaluation, but is likely to be largely determined by the audience. Some common examples are:

- An awareness event for library and information service staff

- a presentation to library and information service staff, academic staff or students
- oral or written feedback to committees at various levels eg Library users' panel, Learning and Teaching Committee
- a short, executive summary of the key points targeted at senior managers
- detailed research reports targeted at library and information service managers
- newsletters for library and information service staff or academic staff
- short reports/newsletters aimed at users (provided in printed or electronic formats)
- external dissemination eg conferences, journal articles, networking contacts
- posters, leaflets and other publicity materials.

## **Stage 8: Use the findings**

It is vital the evaluation findings are not merely reported, but also acted on. Conducting evaluation creates expectations that the findings will be used in some way and people are less likely to participate in the future if they do not see tangible results. The overall purpose of the evaluation should guide the ways in which the findings are used.

Ways in which evaluation findings are commonly used include:

- strategic planning eg to devise policies, to feed into annual report
- budgeting eg to inform budget requests, reallocate resources to better meet user needs and expectations, or justify financial investment
- securing funding from university administrators or external funders
- collection development eg whether to continue licences, which titles to drop, whether to swap from print and electronic format, to set priorities for digitisation
- identifying problem areas and formulate plans to improve quality eg improving staff customer service skills, improving user interfaces
- identifying staff training needs
- making changes to existing services
- benchmarking purposes (which can help to share ideas, information and views, establish best practice and identify trends)
- devising and effectively targeting publicity
- identifying areas for further research.

However, there may be many reasons why evaluation findings are not used to bring about practical improvement. For example:

- a lack of financial resources
- external restrictions eg institutional procedures, vendor conventions
- unsettling results mean it can be difficult to decide what action to take.

- a change in personnel can mean findings are not followed up.
- the way in which the results will be used was not considered at the planning stage of the evaluation.

## **Stage 9: Review the evaluation process and decide on future actions and priorities**

It is important to review the whole evaluation process and reflect on what worked well and what problems were experienced. Questions to consider include:

- Did the evaluation achieve its purpose? If not, why?
- Was a range of data collection methods used?
- Did these methods provide suitable data for the evaluation?
- Could the tools used have been improved in any way?
- Did the timing of the evaluation present any problems? How might these have been avoided?
- Was the level of staffing adequate? Did staff have sufficient time and possess appropriate skills to carry out the evaluation effectively?
- Was the response rate adequate? How might it have been improved?
- Were there any difficulties in analysing the data?
- Were the findings fed back to all relevant stakeholders in an appropriate format?
- What practical results did the evaluation have? Do these match with the purposes identified for the evaluation?
- Is it likely to have additional impacts in the future?

The final stage of the process is to decide on future actions and priorities for evaluation. Deciding the purpose for a new evaluation activity completes the cycle and links back to Stage 1.

There are a number of options when considering the focus for the next evaluation activity. You may choose to:

- explore the same area in greater detail, perhaps using different data collection methods
- investigate a question suggested by the previous evaluation
- evaluate a closely linked area eg moving from the evaluation of learning to the evaluation of teaching
- evaluate a different area of EIS, perhaps one suggested by new service developments or changed institutional priorities, for example.

### Part 3. Evaluation themes

The evaluated toolkit divides EIS evaluation into four main themes: User Experience, Planning, Management, and Impact. These are then subdivided as follows:

User Experience:	Access User support Promotion Perceptions
Planning:	Outcomes Assessment Collaboration and Integration
Management:	Usage Personnel Budgeting Current Provision Future Provision Technical Performance
Impact:	Impact on learning & teaching Impact on graduate skills Impact on research

The following section describes why each of these themes is important and gives practical advice on issues to consider when evaluating each. Further information and evaluation tools eg questionnaires, interview schedules, are provided in the evaluated toolkit ([www.evaluated.uce.ac.uk](http://www.evaluated.uce.ac.uk)).

#### **Access**

For a number of years, the trend in HEIs has been for more teaching and learning to take place away from the university campus, both in the local area and at a more remote distance. This has introduced the idea of the 'virtual library user' who accesses electronic resources from a distance rather than physically visiting the library.

Access to EIS is affected by many factors including: access to PCs on and off campus, password restrictions, users' IT skills and preferred learning styles. With growing student numbers and widening participation and more diverse methods of studying, library and information services need to offer greater flexibility in terms of access as well as resource provision. Factors such as the increasing numbers of part-time students and distance learners, and the number of students with part-time jobs make the facility to access library services at any time and from different locations more important.

#### *Questions to consider when evaluating access to EIS*

- What are the major problems in relation to access to EIS?
- Do problems relate to technical issues, user skills, licensing issues or other factors?

- Do users report and diagnose problems correctly?

Evaluation findings can be used to:

- map patterns of access to EIS
- discover user preferences in terms of access to EIS
- identify the main problems users experience in accessing EIS and suggest ways in which these might be overcome
- suggest ways in which access to EIS resources might be improved eg applying for funding for more PCs, suggesting locations where more PCs are needed on campus.

### ***User support***

Library and information services need to make sure that the support they provide to users is reliable, trusted and responsive. New types of resources provided through EIS require additional skills to those traditionally needed for effective library use. In addition to subject-related questions and general information seeking enquiries, students are likely to require support and training in the use of IT if they are to make full use of the electronic resources available as EIS is being updated on a regular basis and there are frequent changes for users to take on board. Users require help both in the library and when accessing EIS remotely. This means that support is likely to be required beyond normal library opening times and via different media. New types of support developed to meet the changing needs of library users include 24/7 support, email, online tutorials, FAQs, knowledge bases, feedback forms, help desks (virtual or face-to-face), help lines and chat reference desks.

In addition, issues such as loans, tuition fees and widening participation mean that students require more support than ever to cope with both the academic and economic pressures of studying. Library and information services will have to offer support in a way which meets the needs of non-traditional students, including part-time and distance learners. It is not just undergraduates who will require more support, there is likely to be more emphasis on training for research students and for academic staff.

### *Questions to consider when evaluating user support*

- How do staff with responsibility for EIS and other library and information service staff work together to support users?
- Who else provides support for EIS users e.g. tutors, other students?
- Which types of support do students respond to most positively e.g. online, tutorials, printed information, personal (by library and information service staff)?

Evaluation findings can be used to:

- develop new training courses or other forms of support in areas requested by users
- target the marketing of existing support more effectively

- consider ways in which training or support might be used to encourage greater use of particular EIS services or resources
- work more closely with particular subject departments to identify their training and support needs
- demonstrate to institutional managers ways in which the library and information service contributes to learning, teaching and research
- consider the needs of library and information service staff in terms of helping them to support users

### ***Promotion***

The provision of electronic resources is not sufficient in itself; library and information service staff need to ensure that users are made aware of the resources and services available to them. Effective marketing strategies are essential; if resources are to be used as widely and effectively as possible, users need to know about their availability and how to access them. Common methods of promotion for EIS include library web pages, printed guides, posters, newsletters, workshops, class presentations, inductions, media campaigns (video and radio), handbook and displays/exhibitions. However, many students are likely to find out about new services and resources through more informal methods such as contact with other students or tutors.

#### *Questions to consider when evaluating the promotion of EIS*

- Are there promotional materials targeted at specific user groups?
- How do online (e.g. website) and printed (e.g. newsletters, leaflets, posters) forms of direct promotion compare?
- How effective are less direct forms of promotion eg attendance at meetings, promotion by tutors and other students.
- How effective is the timing of promotional activities?
- Is promotion linked to other activities e.g. evaluation, user induction?

Evaluation findings can be used to:

- determine the effectiveness and impact of promotional activities
- examine whether existing methods of promotion offer value for money
- make improvements to existing promotional activities and materials
- make changes to the timing and scale of promotional activities as appropriate
- devise new forms of promotion, for example, materials targeted at specific groups of users
- investigate the informal promotion of EIS among users

## ***Perceptions***

It is important to investigate perceptions of EIS from a number of perspectives to ensure that decisions are not made based solely on the viewpoint of senior library staff. In wider terms, data relating to perceptions of EIS, even at a very local level, can make an important contribution to knowledge within the sector.

Students' use of electronic resources in their leisure time influences their perceptions of and expectations for electronic information services in education. However, while many students, especially 'traditional' 18 to 21 year old undergraduates may have high expectations of electronic services and well-developed skills, others may be more reticent. Among academic staff too attitudes are likely to differ between those who embrace new technology and those who prefer to rely on more traditional resources and methods.

Questions to consider when evaluating perceptions of EIS

- How do various demographic characteristics eg age, gender affect perceptions of EIS?
- How have perceptions changed over time?
- How do perceptions of print and electronic resources compare?

Evaluation findings can be used to:

- Help design a marketing strategy or promotion campaign
- Target information at specific groups eg by age, gender, faculty etc
- Improve training and support offered
- Make decision about new resources to purchase
- Design appropriate search interfaces
- Feed into top level planning decisions eg building redesign, new hardware purchases, staff roles
- Build links with other departments (academic and support)

## ***Outcomes assessment***

In order to win support from institutional managers, library and information service outcomes need to be aligned with the nature and mission of the institution, and the extent to which these are met should be regularly evaluated as part of the planning cycle. Outcomes assessment is not just important for justifying library and information service expenditure and resource allocation, and reporting to institutional managers, it can provide an active mechanism for improving current library and information service practices and focus resources towards the achievement of specified outcomes. The overall goal of outcomes assessment should be continuous improvement.

The areas on which the library and information service chooses to focus will vary from institution to institution, depending on the aims of the HEI. Evaluation should be directly related to the aims and objectives identified in strategic and operational plans for the

university, the library and information service, EIS and other departments if appropriate (e.g. IT, academic departments, learning and teaching strategy). In addition, institutional outcomes will change over time in response to local or national circumstances and library and information service and EIS outcomes will need to alter correspondingly.

#### *Questions to consider when evaluating outcomes*

- What are the key areas of interest for your institution?
- Which of these areas can the library contribute to most effectively?
- How can you evaluate the library's contribution?
- How can this information be used for planning?

Evaluation findings can be used to:

- Inform senior managers of the library's contribution to institutional objectives
- Ensure the library is supporting the institution's aims as effectively as possible
- Identify areas where a greater contribution could be made
- Provide a framework for strategic planning
- Help staff to see how they are contributing to institutional objectives
- Demonstrate how the library contributes to wider issues within the sector.

#### ***Collaboration and integration***

To ensure that it supports the needs of users and the institution as a whole, it is vital that provision of EIS is made in collaboration with:

- academic departments, for example, for course planning and delivery; the development of EIS; training; and research
- Virtual Learning Environments (VLEs)
- other organisations beyond the institution, for example, other libraries, community organisations, partner institutions, businesses, professional bodies or other HEIS, for resource provision and joint activities such as training and promotion.

Within HEIS, there is increasing emphasis on working with businesses and organisations in the local community. This is linked to wider national agendas such as economic regeneration, lifelong learning and social inclusion.

A particular emphasis for libraries will be on the integration of local, regional, national and global resources. SCONUL anticipates that, "there will be growth in consortia-based activities and further institutional mergers as well as expectations of stronger roles for institutions and libraries within their own regions". New strategic alliances and learning partnerships will be more common at service and institutional levels, for instance, with teachers and other learning providers, learning support professionals, external clients in public and private sectors-local, regional, national or global levels.

Internally, the integration of printed and electronic resources presents a major challenge, as does the development of better links between academic and library staff. The latter is vital in terms of take up of EIS and, as QAA has pointed out, to ensure intended learning

outcomes are met. The ongoing development of VLEs has significant implications for libraries and, in particular, EIS. The development of institutional repositories, new methods of course delivery and the need for new staff skills are other institutional issues which have a direct impact on the library and in particular, EIS.

### ***Questions to consider when evaluating collaboration***

- How effective is communication between library staff and academic staff?  
Does this vary across departments?
- How closely are library and wider institutional aims aligned?
- What links do EIS staff have with the wider academic community, the library profession and other organisations such as businesses and community groups?
- What collaborative arrangements exist with other libraries (academic and those from other sectors)?

Evaluation findings can be used to:

- Demonstrate to institutional managers ways in which the library collaborates with other departments to support teaching, learning and research
- Develop new training courses or other forms of support in areas required by research students and staff
- Improving existing training and support provided for students and staff
- Investigate ways in which the library might provide greater assistance for those students who require extra support
- Investigate ways for the library to work more closely with academic departments to support teaching, learning and research, in particular by contributing to course development and delivery
- Improve communication between the library and academic departments
- Identify, and plan the implementation of, new EIS resources or services
- Demonstrate to institutional managers ways in which the library contributes to overall VLE development
- Investigate ways in which the library might be more closely involved in VLE development
- Improve communication and working relationships among those involved in the development of the VLE
- Demonstrate more widely the ways in which libraries can link into VLE development
- Demonstrate to institutional managers ways in which the library contributes to developing external contacts

- Demonstrate to library staff, managers and partners the value of collaboration between the library and external organisations
- Investigate ways to improve collaboration between the library and external organisations eg other libraries, professional bodies, subject support organisations, learning and teaching support organisations
- Identify new organisations with which the library might collaborate effectively
- Demonstrate to the wider academic and professional communities the ways in which the library can work with external organisations
- Identify the main problems of effective collaboration and suggest how these might be overcome
- Identify possible areas for future library collaboration

### **Usage**

While printed materials will continue to be important, the digital delivery of full text and other media will increase, and the use of electronic resources is likely to increase substantially. At the same time, use of certain printed resources may decline. Library and information services can use information gained from evaluating usage of EIS to inform strategy, for example, future acquisitions, licensing agreements and promotional activities.

#### *Questions to consider when evaluating the use of EIS*

- When, how, and by whom is EIS used?
- What factors account for differences in use of EIS by particular user groups?
- What factors might explain varying usage patterns of EIS resources?
- How do changing patterns in the use of EIS relate to the use of print resources?
- How frequently are users turned away from resources they are attempting to access?

Evaluation findings can be used to:

- map patterns of usage of EIS resources
- discover user preferences
- determine priorities for the future development of EIS
- compare the use of different services and resources
- compare the use of print and electronic resources

### **Personnel**

Changes in HEIs, library services generally and, in particular, EIS mean that there are likely to be significant changes in staff roles in the future, with posts evolving and expanding, or contracting, according to institutional circumstances. In addition to the traditional skills of librarianship and information management, staff will be required with

technical and IT skills; highly-developed communication and negotiating skills; customer care; project management; teaching and learner support skills. The key competencies for the future have been identified as:

- Resource management to manage the range of forms and formats, payment models, access controls, copyright and licensing, and quality assurance issues
- Academic liaison to ensure strategic alignment
- Collaborative working both within the institution and externally
- Subject and business understanding to support academic and other researchers
- Learning support skills to provide effective help for independent learners.

Both initial training and continuing professional development need to take account of these changes to ensure a high quality service is offered to users.

#### *Questions to consider when evaluating EIS staffing*

- Who is responsible for the strategic development of EIS? Does their remit include decisions relating to staffing?
- How does the staffing of EIS relate to overall library and information service staffing?
- How effectively are workloads managed?
- How are training needs identified?
- What role do staff outside the library and information service play eg technical staff?
- How does the number and competencies of staff, relate to the size of library and information service and institution?
- What roles do non-EIS specialist staff play? Eg technical staff, learner support staff, acquisitions staff, subject librarians.

Evaluation findings can be used to:

- identify the most effective ways of staffing EIS
- refine working patterns and practices
- manage and distribute staff workloads more effectively
- plan future staffing needs in relation to EIS eg will new tasks be incorporated into the roles of existing staff or will new staff need to be recruited?
- improve communication between staff
- identify training and other forms of continuing professional development required by staff
- identify staff support required and suggest how this might be provided
- Demonstrate to institutional managers how the library supports staff development.

#### ***Budgeting***

The economic environment of HEIs is changing rapidly; the developing culture of accountability and spending reviews is bringing increasing pressure on all departments, including library and information services, to demonstrate value for money. With more emphasis on efficiency savings and diversification of income in the future, library and information services will be under even greater pressure to demonstrate best value. This is particularly relevant in relation to EIS as electronic resources themselves, and the associated costs such as hardware, software, licensing and staffing, currently account for a significant proportion of library and information service budgets, and this is likely to increase as more resources move from print to electronic formats.

*Questions to consider when evaluating the management of the EIS budget*

- How closely is the budget cycle linked to the planning and development cycle?
- How are staff and users able to contribute to purchasing decisions?
- Does EIS provide value for money (in comparison to print materials)?

Evaluation findings can be used to:

- determine priorities for EIS expenditure
- co-ordinate expenditure on electronic and print materials
- demonstrate and improve library efficiency
- ensure the budget is closely linked to library development plans
- provide opportunities for greater stakeholder involvement in budgeting decisions
- demonstrate value for money to external and internal funders of EIS
- compare the costs of different services
- Demonstrate efficiency and value for money to institutional managers

***Current provision***

Electronic resources provided by the library and information service should be varied, authoritative, up-to-date. QAA calls on institutions to consider the adequacy (quantity) and effectiveness (quality) of provision and how learning resources and the means of delivery are selected and updated.

EIS allows resources to be provided in a greater variety of formats which cater for different needs, learning styles and preferences. The focus should be on the way in which resources can support course development; this requires good communication between library and information service and academic staff. However, resources should also be provided which cater for users' informal learning and leisure interests.

*Questions to consider when evaluating access to EIS*

- How does the number of resources compare with the number of students in each subject area?

- Are resources provided in a range of formats to meet different needs and cater for different learning styles?

Evaluation findings can be used to:

- inform decisions regarding the purchase of new EIS materials and the discontinuation of existing EIS materials
- co-ordinate the provision of print and electronic resources
- identify which types of resources are most used and valued by users
- investigate opportunities for greater stakeholder involvement in decisions relating to resource provision
- determine priorities for collection development eg subject areas, users with special needs.

### ***Future provision***

While printed materials will continue to be important, in the future, the digital delivery of full text and other media will increase and the variety of electronic resources targeted at students/learners is likely to expand substantially. With the move from teacher-led to student-centred education, the quality of learning resources and services will be of more central concern.

One major advantage of EIS is its flexibility; it offers the potential to allow the development of customised materials and packages, materials suitable for modular or incremental delivery, as well as resources which will combine externally-published and institutionally created elements.

The trend from a single collection held in the library to access arrangements, either with vendors or other libraries, has implications for future electronic collection development.

### ***Questions to consider when evaluating future provision of EIS***

- How are numbers of students in each subject area expected to change in the future?
- What changes are expected in the types of students eg distance learners, part-time students, special needs, international students? How will this affect the types and formats of materials which will be required?
- What impact might changing models of publishing have eg open access publishing?

### ***Technical performance***

No EIS will operate effectively without a reliable, robust and secure technical platform. A variety of hardware, software, systems and people will be involved in maintaining and delivering the EIS. Evaluation of the IT infrastructure should include, for example, satisfaction with end-user equipment, end-user software and network performance, assessment of new products/services/technologies and the effectiveness of the human interface in dealing with queries, faults and complaints and suggestions. In such a

rapidly changing environment, it is vital to keep abreast of developments and to review performance and strategy in line with these.

*Questions to consider when evaluating technical performance of EIS*

- How is system performance monitored?
- How is system capability measured?
- How is access to EIS managed?
- Are EIS interoperable with other internal and external systems?

***Impact of EIS on learning and teaching***

The impact of EIS on students' subject skills and knowledge can be considered in relation to QAA benchmark standards for a particular subject or in relation to the learning outcomes of a course/module. EIS can also have an impact on the quality of teaching.

In order to avoid being marginalised in the increasingly learner-focused environment of HEIS, library services need to respond positively to the new learning agenda. With the shifting emphasis from teacher-led instruction to independent student learning, library staff are required to play a more significant role in learner support. The development and increasing prevalence of blended learning, e-learning and other new methods of course delivery are central to any evaluation of the impact of EIS on learning and teaching.

It is essential that libraries and EIS are seen as an integral part of learning and teaching, rather than an add-on as students are increasingly likely to expect access to a range of EIS resources and services as a fundamental part of their course.

**Questions to consider when evaluating the impact on EIS on learning and teaching**

- How effective is communication between library and academic staff, for example, in suggesting EIS resources for curriculum planning and delivery?
- How well do EIS resources meet the needs of staff and students? Do staff and students have an opportunity to input into the selection of EIS resources?
- How well does EIS support different teaching methods and learning styles?

Evaluation findings can be used to:

- Demonstrate to institutional managers ways in which the library contributes to learning and teaching in specific subject areas
- Demonstrate to the wider academic community ways in which libraries contributes to skills in specific subject areas

- Develop new training courses or other forms of support in areas required by students studying particular subjects
- Investigate ways for the library to work more closely with academic departments and individual lecturers in resource selection
- Investigate ways for the library to work more closely with academic departments and individual lecturers in course planning, development, delivery and assessment
- Target promotion of EIS resources relevant to specific subjects (via tutors and otherwise) more effectively to raise awareness
- Demonstrate to institutional managers ways in which the library contributes to teaching and course development
- Demonstrate to the wider academic community ways in which libraries contributes to teaching activities, in particular, student-centred learning
- Develop new training courses or other forms of support in areas required by lecturers
- Improving existing training and support provided for lecturers
- Investigate ways for the library to work more closely with academic departments in supporting teaching and course development
- Identify, and plan the implementation of, new EIS resources or services which could help to support teaching.

### ***Impact of EIS on graduate skills***

EIS clearly has the potential to impact on a number of graduate skills. This is most obvious in relation to IT skills and information skills, but EIS can also have an important role to play in the development of critical thinking skills, problem solving skills, communication skills, team working and a host of other graduate skills.

In 1997, the Dearing Report of the *National Committee of Inquiry into Higher Education* identified the importance of Higher Educational Institutions in facilitating skills development to enable the future workforce to manage, and adapt to, technological and social changes. In *Towards a National Skills Agenda*, published in the following year, the UK government Department for Education and Employment reported concern by employers that, “whilst new recruits may have the expected knowledge and understanding, they display a serious inability to apply that knowledge effectively to real workplace situations”. Research, carried out by the Centre for Research into Quality at UCE found that the personal attributes most employers want are:

- Intellect: the ability to analyse, critique and synthesise information to solve problems
- Knowledge: basic principles rather than specialist knowledge
- Commercial awareness and an appreciation of workplace culture
- Willingness to learn
- Flexibility and adaptability: responding to, pre-empting and leading change

- Self-regulatory skills: self-discipline, time-keeping, planning workloads, juggling tasks
- Self-motivation
- Self-assurance
- Communication skills
- Interpersonal skills
- Teamworking.

Questions to consider when evaluating the impact on EIS on graduate skills

- How is EIS used as a form of communication by students and staff?
- How do students work in teams using EIS?
- What information skills do students (or staff) require to make effective use of EIS? Do these differ from traditional 'library skills'?
- How does student/staff level of ICT skills affect their ability to make use of EIS?

Evaluation findings can be used to:

- Demonstrate to institutional managers ways in which the library contributes to lifelong learning eg ICT and research skills and career development
- Demonstrate to the wider academic community ways in which libraries contributes to graduate/key skills
- Develop new training courses or other forms of information skills support in areas required by students eg search skills, locating appropriate resources, evaluating EIS resources
- Develop new training courses or other forms of information skills targeted at specific groups of students eg postgraduates, distance learners
- Improving existing training and support provided
- Investigating new patterns of library staffing to support information skills eg changing roles, cross-team working
- Investigate ways for the library to work more closely with academic departments in the delivery of information skills eg ensuring EIS-related information skills are fully integrated into courses
- Target marketing of EIS resources more effectively to raise awareness
- Identifying ways in which EIS can be used to support students with differing needs and learning styles
- Consider the needs of library staff in terms of helping them to support users eg through staff training, more staff, specialist staff
- Consider ways in which training or support might be used to encourage greater, or more appropriate, use of particular EIS services or resources
- Investigate ways for the library to work more closely with other departments such as careers advisers and learning support staff

- Investigate ways to encourage greater use of EIS resources for non-course-related purposes eg targeted promotion specifically for careers and lifelong learning

### ***Impact of EIS on research***

EIS has the potential to impact significantly on the production of scholarly and creative works. Researchers (staff and students) may make use of EIS to find information to assist in their research, for example, a literature search, the use of an online database or digitised collection. EIS developments are also expanding the formats in which scholarly and creative works are produced eg multimedia presentations. Even when work follows a traditional format eg a journal article, EIS may have an impact on how staff disseminate their research eg online/open access journals.

Questions to consider when evaluating the impact on EIS on graduate skills

- How is EIS used to collect secondary data for research?
- How is EIS used in the collection of primary data?
- What impact does EIS have on the research process?
- What impact does EIS have on the production and dissemination of research?

Evaluation findings can be used to:

- Demonstrate to institutional managers ways in which the library contributes to research
- Demonstrate to the wider academic community ways in which libraries contributes to research activity eg networking, access and dissemination
- Develop new training courses or other forms of support in areas required by research students and staff
- Improving existing training and support provided for research students and staff
- Investigate ways for the library to work more closely with academic departments in supporting research activity
- Target marketing of EIS resources more effectively to raise awareness among research students and staff
- Identify, and plan the implementation of, new EIS resources or services which could help to support research.

## **Part 4. The future**

The fact that the evaluated toolkit has been revised eighteen months after it was originally launched demonstrates that EIS is a rapidly developing area of library and information services. For example, during the course of the evaluated project there has been a noticeable shift from discrete digital libraries to institution-wide VLEs, of which library resources form an integral part. EIS evaluation needs to take account of such ongoing developments. Rather than taking the form of short-term projects, EIS will become further integrated into mainstream library and information services over time.

It is also important that library and information services take account of the changing social, political and economic climate in which they operate, for example, the changing student body, the introduction of student fees and continued emphasis on lifelong learning can all be expected to have an impact on the development, and therefore the evaluation, of EIS.

EIS evaluation is likely to become increasingly user-focussed as initial technical difficulties are overcome and there is greater use of techniques such as personalised learning and portals.

Above all, it is crucial for library and information services to align themselves with the goals of their institution, in particular, demonstrating that they play a valuable role in supporting learning, teaching and research. These concerns, rather than operational issues, will therefore come to form the focus of much of the evaluation activity which takes place.

These developments mean that library and information services staff will require considerable support in the form of tools and training to support them in their work. Even more importantly, however, will be the sharing of tools, techniques, resources and experiences within the library and information community, for example, through benchmarking and the establishment of communities of practice.

The evaluated toolkit is just a starting point. There is clearly much more work to be done in this area and its continuation will be reliant on close collaboration between the research and practitioner communities.