



## CONTENTS

<b>1. INTRODUCTION .....</b>	<b>2</b>
1.1 PURPOSE OF THE EVALUATION.....	2
1.2 USE OF THE EVALUATION RESULTS.....	2
<b>2. METODOLOGY.....</b>	<b>2</b>
<b>3. ANALYSIS &amp; REVIEW .....</b>	<b>3</b>
3.1 BACKGROUND OF DATABASE/SEARCH ENGINE USE .....	3
3.1.1 Finding materials for teaching .....	3
3.1.2 Positive & negative features of search engines & databases .....	4
3.2 USING SEARCHLT .....	5
3.2.1 Searching and browsing .....	5
3.2.2 Search options/filters.....	6
3.2.3 Quick finds.....	6
3.2.4 Viewing full resource record .....	6
3.2.5 Most useful elements of the resource record.....	7
3.2.6 Usefulness of reviews and comments.....	8
3.2.7 Clarity of terms used for certain record elements .....	8
3.2.8 Member services .....	10
3.2.9 Interface layout.....	10
3.3 CATALOGUED RESOURCES .....	11
3.3.1 Initial comments.....	11
3.3.2 Tutors notes & Online distance learning materials.....	11
3.4 CONCLUSION.....	11
3.4.1 How SearchLT differs from other databases .....	11
3.4.2 Suggestions for improvement.....	12
3.4.3 Using SearchLT in the future.....	12
<b>4. APPENDIX 1 - "Evaluation Protocol" .....</b>	<b>14</b>
4.1 INTRODUCTION.....	14
4.2 PURPOSE OF THE EVALUATION.....	14
4.3 USE OF THE EVALUATION RESULTS.....	14
4.4 METHODOLOGY.....	15
4.5 EVALUATOR/S .....	15
4.6 REVIEWER/S .....	15
4.7 INTERVIEW SCHEDULE .....	15
4.7.1 Introduction .....	15
4.7.2 Reviewer's Background.....	16
4.7.3 SearchLT Vs Other Databases/Search Engines.....	16
4.7.4 Tasks, Questions & Observation.....	17
4.7.5 Debriefing.....	19
<b>5. APPENDIX 2 - "Questionnaire" .....</b>	<b>20</b>
5.1 INTRODUCTION.....	20
5.2 REVIEWER'S BACKGROUND .....	21
5.3 SEARCHLT VS. OTHER DATABASES/SEARCH ENGINES .....	22
5.4 TASKS, QUESTIONS & OBSERVATION .....	22
5.5 DEBRIEFING .....	27
<b>6. APPENDIX 3 - "Reviewers Information" .....</b>	<b>28</b>

# 1. INTRODUCTION

SearchLT<sup>1</sup> Engineering is a database with services that aim to help lecturers select and access suitable computer and web-based learning and teaching materials for their courses. It also provides independently produced reviews on the materials to help lecturers make better judgements. It is a national service developed as a part of the FAILTE<sup>2</sup> project funded by JISC. Access to this service is offered as a fully integrated part of EEVL<sup>3</sup> and LTSN<sup>4</sup> Engineering.

This document is a report of SearchLT's evaluations, performed with the help of seven reviewers, particularly lecturers from UK Higher Education Institutions (*see* Appendix 3). The protocol and questionnaire that provided guidelines for performing these evaluations are also presented (*see* Appendices 1 & 2). Analysis and review of the different evaluations/interviews is detailed in section 2.

## 1.1 Purpose of the Evaluation

The main purpose of the evaluation is to determine the usefulness of SearchLT Engineering as a kind of database that can be used by lecturers to locate learning and teaching materials. The evaluation also aims to identify how SearchLT can be improved, the kind of materials lecturers generally look for and whether the interviewed lecturers were enthusiastic about using the SearchLT service in future.

## 1.2 Use of the Evaluation Results

- The evaluation results can be useful to identify the interest of lecturers in using the SearchLT service.
- It can help improve SearchLT and provide academics with a more useful database for supporting teaching and learning.
- It can inform those parties continuing FAILTE's work or starting similar work in the future.

# 2. METODOLOGY

Since we felt that SearchLT needed explaining to our reviewers before they could pass a judgement on it, and since wished to have our questions answered in depth, we decided to conduct a small number of face-to-face interviews/guided reviews rather than try for a large number of returns. Another factor in this decision was the fact that we felt we didn't have much hope of getting a high enough number of informants for reliable quantitative data from questionnaires. In the end we conducted seven interviews, mostly with engineering lecturers (the one exception was an engineering faculty learning technology support officer), from four

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<sup>1</sup> SearchLT Website: <http://searchlt.engineering.ac.uk>

<sup>2</sup> FAILTE Website: <http://www.failte.ac.uk>

<sup>3</sup> EEVL Website: <http://www.eevl.ac.uk>

<sup>4</sup> LTSN Website: <http://engineering.ltsn.ac.uk>

universities, (Glasgow Caledonian, Sheffield, Exeter, and Loughborough). A summary of each reviewer is given in appendix 3. The reviewers were all contacts of people working on the FAILTE project and were selected because they were the type of lecturers who we felt might use SearchLT. But we should note that they were not all enthusiastic about the use of computer-based learning material above other forms of learning innovation. In most cases we went to the reviewers own office, so that their use of SearchLT was taking place on their own computer. We stopped after seven interviews since we felt that we were no longer being told anything significantly new.

The interviews were structured, with tasks and questions set out beforehand by the interviewer. They were carried out in a relaxed and informal atmosphere, where the interviewer and reviewer were able to (and frequently did) talk around the questions and discuss the issues raised in some depth. Typically interviews lasted 1-1<sup>1/2</sup> hours. They started with an introduction to what the FAILTE project was trying to achieve and why the evaluation was taking place. The reviewers were asked to describe their background and how they generally approached the problem of selecting materials to use in their teaching, and more specifically about their use and expectations of search engines and resource databases. They were then set some tasks to do with the prototype of SearchLT.

These reviews had to be guided by the interviewer since at that stage the number of resources in the catalogue were small and there were some known bugs, so that reasonable requests might have given no returns or poor results. Finally, the reviewers were asked some questions to try to summarise their overall impressions of SearchLT. The full protocol used by the interviewer is given in appendix 1. Interviews were recorded onto audio tape, and the interviewer was assisted by a 'deputy' who took notes and was able to pick up on any key points which the interviewer missed or which he felt needed clarifying. The deputy had a 'questionnaire' (*see* Appendix 2) which they used to monitor the progress of the interview and record notes on. The audio tapes and notes for each interview were summarised and the key points which were raised in several interviews are discussed in the next section.

### **3. ANALYSIS & REVIEW**

#### **3.1 Background of Database/Search Engine Use**

##### **3.1.1 Finding materials for teaching**

Types of materials the lecturers we interviewed generally look for includes case studies, interactive simulations like Java applets, images, resource packages, interactive tutorials, research articles, online publishers' resources, concepts with new explanation styles, and other background and general information which are unstructured. Search for new materials was mostly done at the time of developing new modules.

The majority of the reviewers (5 out of 7) used standard search engines like Google, Yahoo and Lycos quite regularly to search for materials (*see* Table 1). Some (3 out of 7) generally centre lectures on textbooks and search engines were used to find additional support to supplement textbooks. A few (2 out of 7) made use of EEVL and other sites like LTSN Engineering and FDTL.

- ☛: “[I look for materials] probably 90% on the Web now and about 10% in the library.”
- ☛: “I certainly use the EEVL site. One source I go to regularly and also recommend to students.”
- ☛: “I specifically use Search Engines, particularly Google to find somewhat more general information rather than EEVL. But, I still regard the text book as the skeleton [of the course].”
- ☛: “[I Obtain materials from] mixture of textbooks, library and the Internet, but majority [of the time] it’s textbooks.”

**Table 1: Reviewers sources for teaching materials**

Source for Teaching Materials	No. of users
Standard search engines like Google, Yahoo and Lycos	5/7
Text books/ Library	3/7
EEVL database	2/7
Other sites like LTSN engineering and FDTL	2/7

### 3.1.2 Positive & negative features of search engines & databases

Search engines are considered to be more useful to look for general and background information rather than searching for particular areas or structured pre-prepared materials. They are believed better when the person knows what he/she really wants, and therefore more easily select from a huge list of resources and structure the materials themselves.

- ☛: “My personal preference is general search and I use Google at the moment. I don’t find anything that is as good as Google. There is enough information in Google if you know what to look for.”
- ☛: “Basically with Yahoo I usually find what I am looking for within a few minutes”.
- ☛: “[Search engines] ability to search by domain [US, UK, Australia] is useful.”

However, it was also commented that search engines lead to lots of links, which are not teaching resources, pages are cluttered, and it wastes time. They also did not provide enough useful information such as resource description, copyright and cost information, which can help make better judgements.

- ☛: “Most of the time I have ended up with things that are vaguely relevant but don’t necessarily answer the need.”
- ☛: “Google is just a general search, it’s not specific.”
- ☛: “Maybe [search engines] can produce a filtering process in the interface, [but then again] we can filter ourselves instead of allowing the interface to make that choice.”

There seems to be confidence when using EEVL’s materials because of vetting and focussing on useful materials. They are considered to be technically accurate and quality resources. The resource links provided by them are believed to have credibility and subject specificity. Because their site is kept up to date there is no wastage of time by coming across broken resource links.

With EEVL you feel a sense of community which we is not present when searching for general information on the Web. On the other hand some didn't seem to use EEVL much and they thought that it was probably because search engines provided everything they were looking for or maybe even lack of time to develop new search techniques.

☞: “To some extent there is a certain amount of vetting or focussing going on. So we have that confidence to use these materials.”

☞: “We get this sense of community when we use EEVL, because we have a feeling who might be using it, feeling of empathy and sameness of requirements.”

☞: “[EEVL] links are more logical than Google.”

## 3.2 Using SearchLT

### 3.2.1 Searching and browsing

It was observed that some reviewers preferred browsing for materials based on subjects first, before searching for specific topics using a word or phrase. They commented that it was probably because they were using SearchLT for the first time and in future they might prefer searching when they are more familiar with the service and interface. Most reviewers said that they would initially perform a general search or browse to know what resources are there, and if there were many resources they would perform a more specific search. Some also found the search and browse being on the same page very confusing (not clear about the browse subject links and checkboxes).

[Note: We have worked on this problem and SearchLT now provides searching and browsing facilities on different pages. The main page of the service is the search page and switching between the search and browse pages is supported using tabs. On the search page subjects are selected using checkboxes and within the browse page they are provided as hyperlinks.]

☞: “I would go right down to the topics. Search by browsing most often and then look at the specific individual keyword search to see if I missed anything out.”

☞: “But once we are more familiar then we would probably search using keywords. Initially looking around in generally terms.”

☞: “I want to see what resources are available. If you look for something specific it is never there. If there are sufficient resources then it is good to search.”

☞: “[I would browse first] to get a feel for what is in there. If I start seeing a lot of entries then I will go back to the search. But if I was used to using it I might go first for the search.”

☞: “I would prefer it if the search and browse were on different pages and starting on the search page would be a more natural thing to do.”

Reviewers remarked that the level of sub-categories or the depth of browsing was useful but it depends on the number of resources. However, a few were sceptical about the way subject classification was done.

☞: “Yes, [this depth of sub-categories is useful] because I could immediately distinguish between what is available and what interested me”

☞: “I see what you want is an infrastructure that can be expanded.”

☞: “The problem about cataloguing is the word you might use may not be the word I use.”

☞: “My only observation is when you break it down that way is if you have a resource which is applicable across more than one area then you might miss it.”

[Note: SearchLT includes a resource under all subject categories that it is applicable.]

### 3.2.2 Search options/filters

Only a few immediately noticed and realised that the filtering options provided could be used with searching (cost, level, interactivity, medium and subject). Some also expected the search options to work with the subject browsing. However, in general all the search options were considered quite useful for filtering. Other suggestions were to provide filters for ‘language’, ‘UK-based’ and ‘time to use’ resources.

☞: “I would think one or more combinations of those options could be useful.”

☞: “I like the options that are there. I will also be interested in ‘how easy it is for an academic to use it and incorporate it into his teaching’ [i.e. filtering my ‘time to use’ resources could also be useful].”

☞: “I don’t think you have many resources to justify all those filters, but as you add them I would perhaps also want ‘language’ filter.”

☞: “When you are doing a search you would like to do a more general search, you wouldn’t want to be too narrow.”

### 3.2.3 Quick finds

It was observed that the reviewers didn’t initially make use of the quick find options without being prompted to look at it. Quick find options were considered to be more useful as qualifiers to an advanced search. It was also remarked that having an entire list of new resources or UK-based resources without any subsections or subject classification might not be very useful.

☞: “Having a subject classification and then being able to search for UK-based materials, that will be quite useful.”

☞: “Yes, [quick finds can be useful]. Quite often I prefer to use resources developed in the UK. Maybe it might be useful to have subject sub-headings rather [within each category] rather than having a whole list.”

### 3.2.4 Viewing full resource record

For most cases it was observed that reviewers directly looked at the resource URL before viewing the full resource record unless they had a focussed idea of what they were looking for exactly. Some did not even notice the full resource record and were not sure what the words ‘view full record’ actually meant, whereas others who had used database services before seemed more familiar. It therefore seems necessary to make the resource description more prominent so that it will be easily noticeable. At the same time, “view full description/reviews/comments”, as suggested by a few reviewers, could be used instead of “view full record” to make it more clear and understandable to all.

☞: “Yes, [I noticed] the full record. That prompted me to look at it before I went to the site. I wouldn’t do that if it was some site that I was familiar with, but if I am not familiar then I will be interested in viewing the full record.”

☞: “Maybe it might be useful to have the full record first [before the URL]”.

☞: “[I would] suggest something like ‘view full description/reviews/comments’ [instead of ‘view full record’].”

There was a mixture of responses about the ‘tabs’; some noticed them easily whereas others didn’t notice them at all. Once again it seems that those who were very familiar with databases and search engines were aware of the ‘tabs’. However, after looking at the different sections the reviewers liked the way the record information was laid out in different sections and also the fact that they didn’t have to scroll down much.

☞: [Reviewer 6] “I noticed it but I am not sure if everyone else would notice it. There is no incentive to view the full record. I think the tabs are not so clear as they would because they are so close to the top logos. If there were more white space in between them then it would be clear that they are tabs.”

☞: “I like the way you’ve got the record laid out.”

☞: “I like the fact that they all fit in one average size browser window and you don’t have to scroll down.”

### 3.2.5 Most useful elements of the resource record

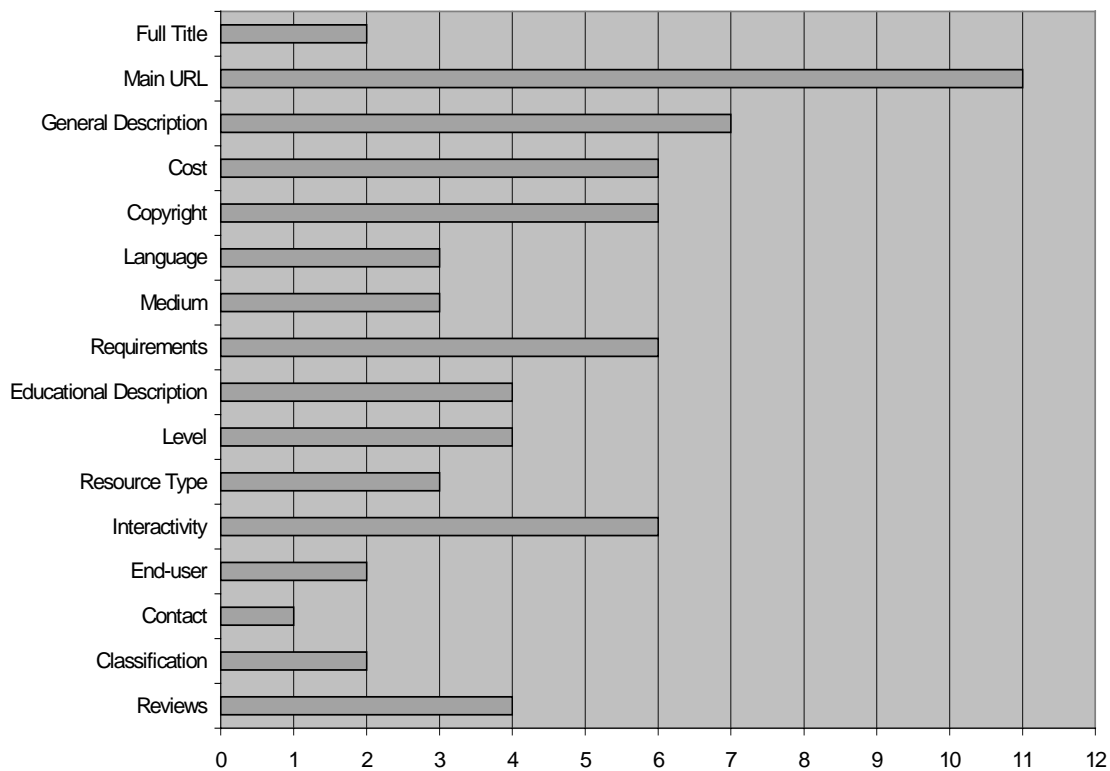
The bar chart shown in figure 1 illustrates the cumulative ratings given by the reviewers for the different elements of a resource record. Note that only the high priority elements are shown in the chart. The rating for the remaining elements are ‘0’ (awards, location, time to use, documentation, EEVL entries, comments) through they were all considered useful information to have.

Most reviewers thought that the ‘full record’ provided all the information they generally look for. One reviewer recommended that an indication of how difficult it is to use a resource might be also useful.

☞: “I can’t think of anything really missing. I think all you have is useful. You don’t want to add too much then it will become cumbersome. I also want to move on quickly so I can have a look at the resource as well.”

However, some reviewers were sceptical about certain elements like educational description, level and time to use. It seems that their scepticism is mostly related to subjective elements for which cataloguers may not be able to give accurate information.

☞: “The controlling side of me questions the validity of the educational description, level and time to use. They are all useful but at the moment I tend to make all of these decisions by looking at the materials myself, and often really quickly you know.”



**Figure 1: Bar chart showing the rating given (out of 70) for priority record elements**

### 3.2.6 Usefulness of reviews and comments

In general all reviewers thought that it is helpful to have reviews and comments. A more directed way of getting comments is considered more useful than just getting peoples comments in general terms. Any kind of review or comment was considered useful to make better judgements about resources. At the same time there could be dangers associated with negative reviews. For instance, even though one user might not be satisfied with a resource, it could be useful for another user with a different purpose and need. But negative comments could put them off.

- ☛: “Yes, [reviews are useful because] academics respect the views of other academics than anyone else.”
- ☛: “If you target specific people [those reviews] will be more controlled and realistic.”
- ☛: “There is a slight danger if the reviews are negative, simply because it did not fit their use.”

### 3.2.7 Clarity of terms used for certain record elements

Expositive for interactivity type:

According to the reviewers the term expositive didn’t seem very suitable for interactivity type. One suggestion was to have interactivity levels – not interactive, interactive and highly interactive. Other suggested alternatives for expositive were – not very interactive, text-based, little interactive and explanatory. It was also recommended that a ‘tooltip’ to explain such terms would be useful.



☞: “The term you used is expositive and that is not a definition of interactivity type, because it is either interactive or not interactive”

☞: “Certain students will struggle with that. I think the key thing is, is it interactive or not”

#### Cost per student:

Most reviewers thought that different suppliers/people have different methods of costing and so it needed a clearer explanation on how it is worked out. A full line information rather than just a cost value was considered better.

☞: “I would think it is cost per student or per license.”

☞: “I would assume that it is cost per seat because we have 130 in the 1<sup>st</sup> year and we have got only a 30 seat computer lab. So, I would assume that is it cost per computer seat.”

☞: “Each supplier has a different way of providing cost. It will be difficult in that case to provide cost in a consistent way. I would expect to be given whatever price the manufacturer has given to you.”

#### Foundation, introductory, advanced & general for educational level:

The exact difference between foundation and introductory was not very obvious though a general idea about each of these levels with relation to UK higher education system seemed clear. But within UK itself the levels are different in England and Scotland. Hence, a more general guidance was considered to be quite useful.

☞: “Difference between foundation and introductory is not tremendously clear. I think a lot of these elements will depend on each individual person, but general guidance is useful.”

☞: “I think it would be foundation was pre-requisite, whereas introductory might be an introduction to a subject area, say maybe in the first year. I am not sure if it is very clear, but these terms are more general rather than specific like 1<sup>st</sup> year or 2<sup>nd</sup> year. So, maybe that is the way to go about it.”

#### Resource pack for resource types:

In general the use of resource pack wasn't clear and was misunderstood to mean a package, a collection of resources and hard copy or tangible material. Explanation was considered necessary.

☞: “My immediate thing would be it's a wide, all encompassing amount of teaching material with web-based material and other media.”

☞: “I would assume that it was a group of resources or some kind of resource. It is a very general term and wouldn't give me further information. ”

☞: “From a lecturer's point of view, a pack would be something put together by someone else. The notion of a lecturer actually seeing that word pack is less inviting than if we were able to put together such a information for students ourselves.”

### Tutor, student & author for end-user:

Some were clear about the difference but others were not and thought that end-users were mostly either students or academics. One reviewer thought that it was difficult to classify resources this way.

☞: “There is a danger of everything becoming standardised. For example, to say that this is for a student to use or this is for an author, I don’t think that is how education tends to work. Different personalities of teaching and different kinds of students respond to different styles of teaching or methods. For example, one person might think that it is designed for tutors whereas another person might think that it is for a student. So I tend to take such things with a pinch of salt and take my own decisions regarding them.”

### **3.2.8 Member services**

Reviewers thought that email notification about new resources matching their preferred search options was a useful service. This would prompt them to look at what new resources are available. At the same time users should have the ability to stop the service when required.

☞: “It will be really useful but you should have the opportunity to shut it off. The problem is so much stuff comes through the email and we don’t always have the time to look at it.”

Ability to save searches was also considered useful. One of the reviewers thought that the need for a ‘password’ to login was not helpful for users who did not make use of SearchLT service regularly as it was easy to forget it. It was suggested that the ‘email’ address be used instead of a ‘password’. However, due to insufficient time at the interviews it was not possible to work through every member feature.

### **3.2.9 Interface layout**

The reviewers appreciated the consistent appearance and layout of SearchLT’s interface. Not much opinion was given on how the interface could be improved because they did not have enough time to work with it.

☞: “I am personally keen on this idea of web pages having a consistent appearance for example things like home button appear at the same place on every page, some regularly in some shape of form is necessary. That is very good and valuable. SearchLT has a fixed sort of navigation method, which is good.”

☞: “One of the things is ‘how much of the screen is used up before we get to the bottom’ i.e. the ‘search hints’. Just take care the size of the headings and logos on the top doesn’t mean that we have to keep flicking down.”

☞: “I like the fact that everything loads very quickly. Sometimes when it takes a long time to load it’s not very nice.”

### 3.3 Catalogued resources

#### 3.3.1 Initial comments

Reviewers thought that it was useful when materials are organised and there is an easy way to find and access them. There are lots of useful materials and it is a waste of effort and time to reinvent the same.

☞: “Sometimes I can spend a morning searching through the Web for information and you may not find useful stuff.”

☞: “It can save time.”

#### 3.3.2 Tutors notes & Online distance learning materials

Materials put together by other tutors for their lecturers are considered useful mostly for the purpose of comparing and being aware of what others are doing for similar subjects. Occasionally interesting resources are also regarded as useful materials for some good ideas.

☞: “Its useful for observing what other people are doing and also to get some knowledge and information style.”

☞: “I think it’s a good way to bring community together. It’s always a very positive exchange and sometimes it could lead to useful relations.”

☞: “Any [teaching and learning material] is good, because there are lots of people writing excellent pieces of information and they are much better than I am. So I would like to point my students to them.”

Online distance learning materials, which are not explicitly available for other institutions, are also considered useful. However, one of the reviewers believed that most institutions are quite far away from the educational resources provided by online distance learning materials such as those produced by IEE and so they may not be of much use.

### 3.4 Conclusion

#### 3.4.1 How SearchLT differs from other databases

Most reviewers thought that SearchLT was useful and different from other databases and search engines they have used. The general opinion was that SearchLT is more specific, efficient, focussed and time saving but it has to be regularly maintained and updated to be really useful. Their views are probably best expressed through quotes from the interviews.

☞: “I don’t think that it is terribly different in terms of the interface and how we use it. But, what’s behind it and what’s there is different. Teaching resources are quite useful.”

☞: “It’s more specific than Google and it’s useful. I will be certainly watching it and seeing what comes out of it.”

☞: “It is much more focussed than standard search engines and you also have different methods of searching which is good.”

☞: “I think it is good, because you can find useful resources really easily either by search or browse. SearchLT’s contents seem to be more focussed than EEVL’s. EEVL’s got a lot of stuff that is not really teaching and learning type material.”

☞: “Seriously this looks useful, it’s a matter of how it grows and how comprehensive it becomes obviously. The big problem I can see with something like this is, its got to grow to become very comprehensive and it should have a lot of information and I should have the confidence that if a resource is out there, I should be able to find it through this database. The resources have to be constantly updated.”

☞: “It is more useful than Google because you get specific teaching and learning resources. But there is a danger that you might miss some teaching resources. But, if I find it in SearchLT then I would not search on the Web.”

These comments seem very positive, but more constructive criticisms came when they were asked whether they would use SearchLT in the future (*see* Section 3.4.3).

### 3.4.2 Suggestions for improvement

Besides the comments seen throughout this report, not many additional suggestions were given for improving SearchLT service and this is mainly due to the fact that the reviewers did not have enough time to work with it. However, most of them said that if there was a follow up interview at a later point of time they would probably be able to provide further suggestions.

☞: “It is important for resources to be categorised in the right way. I can imagine that it can be very frustrating when somebody has categorised it wrongly.”

☞: “What you need to do is contemplate, how you can get the authors to send you the resources so that it can be catalogued automatically, without that it will never be up to date. [Could have a form something like ‘would you like to add your resource’, ‘promote a site’, ‘register a site’ or ‘log a site’ to get people to catalogue resources]”.

### 3.4.3 Using SearchLT in the future

The most common remark was that though SearchLT is useful they would use it when it has enough records. At present it doesn’t provide the depth of materials like other standard search engines and databases. When it is populated with more resources they thought that SearchLT could be used as their first source for finding information before others search engines.

☞: “I think that it is very focussed on teaching materials rather than general or background material. In terms of me using it that would take a different mental setup for me, to take someone else’s teaching material and use that. I am sure that there is a big efficiency going to be made by using something like this, but I am not sure about me. But, there can be many other lecturers who would like to make use of such pre-structured teaching materials.”

☞: “It is difficult to say if I am going to use it. It is important to maintain such a service. I don’t think I can answer this until I see it fully working. I need to be convinced that I can find useful information all the time. Which I feel I can with the other search engines. But with SearchLT it can be found more efficiently and it filters out all the rubbish maybe. I will be prepared to

recommend paying for this if it could do all that more quickly. But the danger is if it cant get the depth of material like the other search engines.”

●: [Reviewer 6] “I think I will use it in the future to try and get existing resources and get the different departments to focus on it.”

●: “Yes, I would use it but it wouldn’t be as useful as Google, but it will be different. It’s exactly like a research database and that is quite useful if you are looking for something specific. I would probably use it like that.”

## **4. APPENDIX 1 - “Evaluation Protocol”**

### **4.1 Introduction**

This protocol aims to provide guidelines for evaluating Failte’s SearchLT Engineering. The idea is to allow the evaluator/s to guide the interview and provide stimulus for discussion by using these guidelines (the broad headings) as the basis for conversation. Most questions are kept open so that they can be adapted to the specific context. However, it is important to maintain the interview time to at the most an hour.

The headings/sections are designed to be areas/broad topics/issues in which the evaluator/s may wish to engage the reviewer/s in conversation and it may well be that the open questions may raise and cover certain issues during discussions. The protocol is designed to give the evaluator/s ideas about the sort of things to ask/to talk about. Hence, the actual questions can be adapted based on the conversation.

It is important to keep note of all the observations whether considered critical or non-critical at that time. Critical incidents, either positive or negative, observed can be discussed further if necessary by raising questions about that actual incident under actual headings, for e.g. “I noticed that you were... Can you tell me a bit more about that...” It might also be necessary to probe the observations further and find out the reviewer/s thoughts while performing the actions and the reasons behind carrying them out in that particular fashion.

It will be effective to perform about 8-10 evaluations with reviewers from diverse engineering backgrounds, different universities and a number of different contexts.

Ideally make use of a tape recorder, preferably with a group microphone (in the case of two reviewers), for recording the interview sessions.

### **4.2 Purpose of the Evaluation**

The main purpose of the evaluation is to evaluate SearchLT Engineering and determine its usefulness as a kind of database that can be used by lecturers and students to locate learning and teaching materials. The evaluation should also identify if and how enthusiastic the interviewed lecturers were about using the SearchLT service in future.

### **4.3 Use of the Evaluation Results**

- The evaluation results can be useful to identify the interest of lecturers in using the SearchLT service.
- It can help improve SearchLT and provide academics with a more useful database for supporting teaching and learning work.
- It can inform those parties continuing FAILTE’s work or starting similar work in the future.

## 4.4 Methodology

Open, qualitative methodologies such as interviews and observations, which are best suited for explorative evaluations, should be employed. Though most questions are to be kept open for a more descriptive feedback some can use a checklist or Likert scale to obtain quick information.

## 4.5 Evaluator/s

Ideally two evaluators should be involved in the evaluation. While the first evaluator guides the interview and records the conversation (tape recorder), the second evaluator should observe the reviewer/s and record the observations (notes).

## 4.6 Reviewer/s

There may be one or ideally two reviewers involved during an evaluation. In the case of two reviewers, both should be involved in most discussions except when one completes a task before the other. Here, the first evaluator can engage the reviewer in a discussion while the second evaluator observes the other reviewer performing the task.

Most of the evaluations should be performed with lecturer/s, but one or at most two evaluations can be also conducted with a group of students. These evaluations can be useful to get additional feedback in certain areas such as usability of the interface and understanding and use of databases by students.

## 4.7 Interview Schedule

### 4.7.1 Introduction

- The evaluators should briefly introduce themselves, SearchLT and the purpose of the evaluation session. What is the evaluation study about? How the data collected is going to be used?

SearchLT Engineering is a database to help find resources on the Internet. It is a national service developed as a part of the FAILTE project funded by JISC. SearchLT is a little bit like the catalogue for an electronic library and allows computer- and web-based learning and teaching materials to be identified and accessed through its user-interface provided at

<http://searchlt.engineering.ac.uk/index.php>

Through this interview we aim to evaluate SearchLT and determine its usefulness as a kind of database that can be used to locate learning and teaching materials. Analysis of evaluation data can help improve SearchLT and provide academics and students with a more useful database for supporting teaching and learning work.

- It will be necessary for the evaluator/s to explain that they are only interested in getting insight into everyone's perspective of SearchLT. Moreover, they have to ascertain that the

reviewer/s understand that their view of SearchLT is vitally important in helping the FAILTE project to provide a useful database that offers suitable learning and teaching materials for lecturers and students. It should also be made clear that it is not them but SearchLT that is being evaluated.

- Make sure that the reviewer/s know what is expected of them during the evaluation study.
- A request to audio-tape the interview and record observations will need to be made, together with the explanation that it will help to have a record of the interview for the purposes of data analysis.

#### 4.7.2 Reviewer's Background

- Find out how the reviewer/s generally find materials for teaching?

Please can you talk me through how you generally find the materials/resources that you use for teaching/lecturers?

I mean a library, word of mouth or databases such as EEVL, Google, NEEDS?

- Find out which databases they have used or have heard about. How frequently do they use it? (EEVL, NEEDS, Google ...etc.)

You mentioned that you have heard about databases, which ones did you hear of?

You mentioned that you have used databases before, which ones did you make use of? How often do you make use of its services?

You mentioned that you have used database-X before. So, how often do you make use of its services?

What kind of computer based resources are more useful for your students?

- Find out what were the most and least useful features, descriptive elements, search options of the databases/search engines they have used. Find out about some missing/not useful features they would have liked to in such databases/search engines?

What do you think are the most useful features of database-X?

Are there features that you thought were missing in database-X and would like to see in an database?

Any features that you thought were least useful?

#### 4.7.3 SearchLT Vs Other Databases/Search Engines

- Briefly introduce how SearchLT is different from other databases like EEVL, Google? Explain what we aim to do in the Failte project.



The most prominent way, by which SearchLT service differs from other databases such as EEVL or Google is that, it catalogues only those computer- and web-based materials that are specific to learning and teaching. Also the types of Websites not included are:

- Research groups
- Journals
- Patents (Copyright)
- Industry home pages
- Departmental home pages

We can look at an example resource to see the difference in the actual material content that is catalogued by EEVL and SearchLT.

For e.g. if we look at this Website <http://www.bu.edu/pcms/> which has an EEVL record, it is not easy to identify the useful teaching and learning material with this site. Now, if we go to the tutorial from here: Main → Demos → Interactive Flow Net Tutorial. It is this Website <http://www.bu.edu/pcms/kaan/fn/index.html> that SearchLT catalogues.

Do you feel that this way of cataloguing specific materials within a site rather than the entire site might be more useful for obtaining teaching and learning materials?

- What are the expectations of the reviewer/s in terms of search options and record elements of SearchLT.

Before you see the SearchLT interface, can you please tell us the search options/criteria that you would like/expect to see?

- Open the SearchLT Website <http://searchlt.engineering.ac.uk/>.

#### 4.7.4 Tasks, Questions & Observation

- Let the reviewer/s have a go with SearchLT and allow them to set their own tasks. This might be more useful and appropriate than a standardised task. Observe their actions, record them and ask questions when necessary.

“Find something for your next course”. If necessary give them a task such as “search for tutorials about ‘material’ for a civil engineering lecture” or “search for ‘flow nets’ tutorials”.

Why did you check that option? What did you expect to happen when you selected that? Did the response meet your expectations?

Is the information on the interface clear? What do you think each element on the user-interface does?

Do you generally search for a particular resource or browse for all information relating to a subject?

What are your expectations/needs regarding the granularity/size of the resource?

When you search for web-based resources, do you generally look for highly interactive materials? Or is interactivity level not an issue?

Do you consider the quick find searches and notification of new resources to members as useful features? Any other suggestions to improve member services?

*Observe* if they are making use of drop-down menus for e.g. resource cost, interactivity.

*Observe* which search options they are using and the priority they are giving for the various search options.

*Observe* if they are using the quick find searches such as ‘new resources’, ‘UK-based’.

*Observe* if they seemed interested in viewing the whole record or did they want to go to the URL directly.

- Just after searching for a resource, ask the reviewer/s if they usually view the partial/full record of the search results before going to the Websites or do they directly go to the resource URL. Find out what resource descriptions/elements they expect or would like to see.

Can you please tell us if you usually view the partial/full record of the search results before going to the actual resource URL?

When you actually view the record, what descriptions of the resource do you expect/would like to see?

- Find out if the UI was easy to use and if the searching was efficient.

Did you find the user-interface easy to use?

Would you like to comment on the efficiency of the search?

- After looking at a record, find out what they think are the most useful elements/descriptions in a SearchLT record. Find out if the terms used for these elements are appropriate, meaningful and consistent. If not, ask them suggestions for alternative words?

If you were given 10 points and asked to distribute them among the most useful elements of the record, how will you distribute them? By elements I mean the “Title, URL, Description or Cost”. You are allowed to give all 10 points to a single element if you wish to do so.

Do you feel that the SearchLT record provides all the information that you generally look for?

Do you think that the terms used for these elements are appropriate, meaningful and consistent? For example, terms such as Expositive, Resource Pack, Cost and Educational Level, Level of granularity for Subject Classification, are their meanings clear? If not, do you have any alternative suggestions?

Do you consider 'Reviews & Comments' as a necessary description in the record?

Do you feel that 'Keywords' are important along with the resource description?

- Make them view two/three resource URLs, and ask them what they think about the content of these resources?

(1) [http://www.eurasip.org/new\\_to\\_dsp.htm](http://www.eurasip.org/new_to_dsp.htm)

This is an example resource where the tutor has put together notes for his own course. Do you expect such resources to be useful?

(2) <http://www.iee.org/EduCareers/DLearn/SoftEng/hci.cfm>

This is an IEE Distance Learning course Website. Do you expect/would like to find online distance learning courses offered by an HEI, which aren't explicitly available for use by other institutions?

#### 4.7.5 Debriefing

- Comment on the usefulness of SearchLT, its comparison with other information sources or databases.

Can you please comment on how you think SearchLT differs from the other databases and search engines that you mentioned earlier on. Do you feel that SearchLT is more useful in some way?

What additional features/services do you think SearchLT should provide to make it more useful?

Do you think that you will use databases more in the future to search for teaching materials? Or would you prefer using the library?

Would you consider using SearchLT? Why?

SearchLT, EEVL, Google are all free services. Though SearchLT will always remain a free service, if we suppose that it is a subscription service will you be still willing to buy it?

If Google costs £1000 per year, what would you pay for SearchLT?

## 5. APPENDIX 2 - “Questionnaire”

This questionnaire was used during the interviews for guidance and to keep track of what was covered.

### 5.1 Introduction

1.  **Introduce Yourself**

2.  **Introduce SearchLT**

SearchLT Engineering is a database to help find teaching and learning resources on the Internet. It is a national service developed as a part of the FAILTE project funded by JISC. SearchLT is a little bit like the catalogue for an electronic library and allows computer- and web-based learning and teaching materials to be identified and accessed through its Web interface.

3.  **Purpose of Evaluation**

We are interested in getting everyone’s, particularly lecturers, perspective of SearchLT. Through this interview, with your help, we aim to evaluate SearchLT and obtain information to help us determine its usefulness as a kind of database that can be used to locate learning and teaching materials. We would like to use the evaluation results to improve SearchLT and provide academics and students a more useful database for supporting teaching and learning work.

4.  **What is Expected of Them**

To begin with, we would like to obtain some background information about you in relation to our evaluation subject. Then, we will briefly present SearchLT and would like you to have a go with SearchLT using simple tasks, which you can set on your own, while we record observations and ask related questions.

5.  **Request to Audio Tape**

Before we begin, I would like to request your permission to audio-tape this session. Record of the interview is only for the purpose of information analysis.

## 5.2 Reviewer's Background

1.

Please can you talk me through how you generally find the materials/resources that you use for teaching/lecturers?

I mean is it from a library, colleagues or databases on the Web such as EEVL, Google, NEEDS?

Library     EEVL     Google     Others

2.

You mentioned that you have used (heard of) databases before, which ones did you make use (hear) of?

EEVL     NEEDS     Google     Others

3.

Which one did you find more useful? How often do you make use of its services?

<input type="checkbox"/>	EEVL	<input type="checkbox"/>	NEEDS	<input type="checkbox"/>	Google	<input type="checkbox"/>	Others
<input type="checkbox"/>	Very often	<input type="checkbox"/>	Often	<input type="checkbox"/>	Few	<input type="checkbox"/>	Rarely

4.

What do you think are the most useful features of database 'X'?

*(Probe Deeply - search options, record descriptions, Google ranking)*

5.

Any features that you thought were least useful? *(Probe Deeply)*

6.

Are there features that you thought were missing in database 'X', and would like to see in SearchLT? *(Probe Deeply)*

### 5.3 SearchLT Vs. Other Databases/Search Engines

1.  **How SearchLT Differs from Other Databases**

The most prominent way, by which SearchLT service differs from other databases such as EEVL or Google is that, it catalogues only those computer- and web-based materials that are specific to learning and teaching. The types of Websites not included are:

Research groups

Journals

Patents

Industry home pages

Departmental home pages

We can look at an example resource to see the difference in the actual Website that is catalogued by EEVL and SearchLT.

For e.g. if we look at this Website <http://www.bu.edu/pcms/> which is catalogued by EEVL, it is not easy to identify the useful teaching and learning material with this site. Now, if we go to the tutorial from here: Main → Demos → Interactive Flow Net Tutorial. It is this Website <http://www.bu.edu/pcms/kaan/fn/index.html> that SearchLT catalogues. By cataloguing this we aim to make it easier to find useful material within the Website.

### 5.4 Tasks, Questions & Observation

1.  **Open SearchLT Website** <http://searchlt.engineering.ac.uk/>

This is the SearchLT Web interface. We would like you to have a go with it by setting your own tasks.

2.

Or let's say "Find out something for a course your are currently teaching".



Observe if they are making use of drop-down menus for e.g. resource cost, interactivity.

Using                       Not using



Observe if they seemed interested in viewing the whole record or did they go to the URL directly.

URL                       View record

3.

Can you please tell us if you usually view the partial/full record of the search results before going to the actual resource URL?

URL                       View record



What did you expect to happen when you selected that?

Did the response meet your expectations? (*Ask when required*)

Yes                       No                       Not sure



Observe if they are searching for a particular resource or browsing for all information relating to a subject?

Mostly Search                       Mostly Browse                       Both

4.

Do you generally search for a particular resource or browse for all information relating to a subject?

Mostly Search                       Mostly Browse                       Both

5.

What do you think each element on the user-interface does?

Search Options    Subjects    Quick Find    Member

6.

What priority will you give for each of these search options?

Cost    Level    Interactivity    Medium

7.

Do you consider notification of new resources to members as useful features?

Any other suggestions to improve member services?

Very useful    Useful    Not useful    Not sure



*Observe* if they are using the quick find searches such as 'new resources', 'UK-based'.

New    Free    UK-based    Interactives    EEVL Key sites

8.

Do you consider the quick find searches useful?

Very useful    Useful    Not useful    Not sure

9.

Can you please suggest how we can improve the user-interface?

10.

Would you like to suggest some improvements for the search and browse options?





Observe if the reviewer noticed the 5 sections “General”, “Education”, “Details”, “Reviews”, “Comments”.

Yes  No

11.

If you were given 10 points and asked to distribute them among the most useful elements of the record, how will you distribute them? By elements I mean the “Title, URL, Description or Cost”. You are allowed to give all 10 points to a single element if you wish to do so.

<input type="checkbox"/> Full title	<input type="checkbox"/> Main URL	<input type="checkbox"/> General description	<input type="checkbox"/> Cost
<input type="checkbox"/> Copyright	<input type="checkbox"/> Awards	<input type="checkbox"/> Language	<input type="checkbox"/> Medium
<input type="checkbox"/> Requirements	<input type="checkbox"/> Location		
<input type="checkbox"/> Educational description	<input type="checkbox"/> Level	<input type="checkbox"/> Resource type	<input type="checkbox"/> Time to use
<input type="checkbox"/> Interactivity	<input type="checkbox"/> End-user	<input type="checkbox"/> Documentation	
<input type="checkbox"/> EEVL entries	<input type="checkbox"/> Contact	<input type="checkbox"/> Classification	
<input type="checkbox"/> Reviews	<input type="checkbox"/> Comments		

12.

Do you think that SearchLT record provides all the information that you generally look for?

All  Most  Little  None

13.

Do you think that the terms used for these elements are clear? What do you think it means?

For example, use of “Expositive” for “Interactivity Type”?

Say we have “Cost less than £20” what do you think that means?

What about the use of “Resource Pack” for “Resource Type”.

Are the use of terms “Introductory”, “Foundation”, “Intermediate”, “Advanced” and “General” for “Educational Level” clear?

If not, do you have any alternative suggestions?

Expositive  Clear  Not Clear  Alternative

Resource pack	<input type="checkbox"/>	Clear	<input type="checkbox"/>	Not Clear	Alternative	<input type="text"/>
Cost	<input type="checkbox"/>	Clear	<input type="checkbox"/>	Not Clear	Alternative	<input type="text"/>
Educational level	<input type="checkbox"/>	Clear	<input type="checkbox"/>	Not Clear	Alternative	<input type="text"/>

14.

Any comments on the Number of Sub-Categories or Depth of Browse for Subject Classification provided. (*Show example*)

15.

Do you think 'Reviews & Comments' would be useful?

Very useful    Useful    Not useful    Not sure

16.

Do you consider 'Keywords' as a useful description in the record?

(*Explain more if necessary*)

Very useful    Useful    Not useful    Not sure

17.

We would like to show you 2 different kinds of resources.

(1) [http://www.eurasip.org/new\\_to\\_dsp.htm](http://www.eurasip.org/new_to_dsp.htm) (In SearchLT search for DSP, Introduction for DSP Website)

This is an example resource where the tutor has put together notes for his own course. Do you expect such resources to be useful?

Very useful    Useful    Not useful    Not sure

18.

(2) <http://www.iee.org/EduCareers/DLearn/SoftEng/hci.cfm>

This is an IEE Distance Learning course Website. Do you expect/would like to find online distance learning courses aimed at individual students, which aren't explicitly available for use by other institutions?

Very useful    Useful    Not useful    Not sure

## 5.5 Debriefing

1.

Can you please comment on how you think SearchLT differs from the other databases and search engines that you mentioned earlier on.

(*Probe Deeply* – useful features & problems of SearchLT)

2.

What additional features/services do you think SearchLT should provide to make it more useful?

3.

Do you think that you will use online databases more in the future to search for teaching materials? Or would you prefer using the library?

Databases

Library

Both

4.

Would you consider using SearchLT in the future? If so why?

Definitely

Yes

Maybe / Not sure

No

5.

SearchLT, EEVL, Google are all free services. Though SearchLT will always remain a free service, if we suppose that it is a subscription service will you be still willing to buy it?

Say that Google costs £1000 per year, what would you be willing to pay for SearchLT?

Definitely

Yes

Maybe / Not sure

No

Amount

## 6. APPENDIX 3 - “Reviewers Information”

No.	Profession/ Interest
Reviewer 1	<p>Lecturer Electrical &amp; Electronics Engineering, Glasgow Caledonian University</p> <p>Very enthusiastic about using web-based and computer-based materials for teaching.</p>
Reviewer 2	<p>Lecturer Electrical &amp; Electronics Engineering, Glasgow Caledonian University</p> <p>Centres lectures around textbooks and uses the Internet to find additional support to supplement information in textbooks.</p>
Reviewer 3	<p>Lecturer Electrical &amp; Electronics Engineering, Sheffield University</p> <p>Prefers using the library and contacts to find materials. Makes very little use of the Internet.</p>
Reviewer 4	<p>Lecturer Civil &amp; Structural Engineering, Sheffield University</p> <p>Very keen about using the Internet every day.</p>
Reviewer 5	<p>Lecturer Civil &amp; Building Engineering, Loughborough University</p> <p>Favours library and textbooks but does use the Internet.</p>
Reviewer 6	<p>Learning Technology support officer for engineering Loughborough University</p> <p>Work includes a broad mix of developing learning technology based materials for staff, helping staff to integrate current learning technology materials into their teaching and project based learning. Enthusiastic about enhancing teaching by encouraging individual departments to develop learning, teaching and assessment strategies within engineering.</p>
Reviewer 7	<p>Lecturer Electronics Engineering, Exeter University</p> <p>Interested in teaching development projects and is a member of learning and teaching support centre at Exeter.</p>