

# Got the GIST?



Ann Cross  
Information Services Manager  
Learning Resources Centre,  
University of Glamorgan  
Tel: 01443 483376  
E-mail: [across@glam.ac.uk](mailto:across@glam.ac.uk)



Sue House  
Information Librarian, Law  
Learning Resources Centre,  
University of Glamorgan  
Tel: 01443 483376  
E-mail: [schouse@glam.ac.uk](mailto:schouse@glam.ac.uk)

We all live in an information society; the business world expects our graduates to be information literate, our students have at their disposal more information than ever before. So how are we helping them to navigate the paths to knowledge, to locate the best and to filter out the rest? With GIST – Glamorgan Information Skills Training. The aim of the project was to develop online training materials embedded into the curriculum instructing students about basic information skills.

As busy librarians we were struggling to reach a growing and diverse student body and wanted to update our face-to-face information skills workshops with a blast of new technology, bringing in new thinking on information literacy.

## METHODOLOGY

Following a literature review, one account in particular was identified as being similar to that envisaged for GIST. A subsequent visit to Claire Abson<sup>1</sup> at Sheffield Hallam, who was part of their 'Infoquest' project, proved very informative. The 'Big Blue' project literature review and update 2002<sup>2</sup> – regarding information literacy theory and practice – also informed the project about the development of information skills learning and teaching. Attendance at a number of external events provided current awareness of on-going projects and developments in the field.

The literature on information literacy argues quite strongly that information skills are best delivered within a subject-based context. The idea was therefore to provide a set of information skills

materials embedded into one first year module in the school of computing. The module 'Introduction to multimedia and the web' was identified after discussions with the head of school as containing suitable learning outcomes for the purposes of the project.

The project began in March 2003 with scoping the extent of the work to be carried out with the module leader and the e-learning services team<sup>3</sup>. The use of Blackboard as a support mechanism was already well-established in the school of computing, so it would be a familiar environment to the students. Also it had been observed that as the students in this discipline seemed to prefer using a computer to reading a book, online materials were considered better suited to their learning styles.

An on-line interface had been developed in-house to support the university's European funded e-learning project 'Enterprise College Wales'. The same interface was adopted for GIST. This offered the advantage of not having to develop a look and style from scratch and meant that the information skills materials would be more easily integrated into future online modules. The Blackboard computing module therefore provided a link to the GIST materials which utilised the in-house interface.

The screenshot shows a web browser window displaying the INSPEC search interface. The browser address bar shows the URL: <http://baen01.glam.ac.uk/applications/customapps/splitscreen.asp?urllinkhttp://www.glam.ac.uk/iro/&height=565&width=220&window=lobby&file=JournalIP>. The page title is "Inspec <1969 to 2004 Week 48>". Below the title, there are navigation icons for Author, Title, Journal, Search Fields, Tools, Combine, Limit, Basic, Change Database, and Logoff. A table titled "Search History" has columns for "#", "Search History", "Results", and "Display". Below the table, there is a search form with a text input field containing "HCI standards", a "Perform Search" button, and a "Map Term to Subject Heading" checkbox. There are also checkboxes for "Full Text", "Latest Update", "Abstracts", and "English Language", and a "Journal Paper" checkbox. A "Publication Year" dropdown menu is also visible. At the bottom, there is a copyright notice: "Copyright (c) 2000-2004 Oxid Technologies, Inc. Version: re9 2.0, SourceID 1.9998.1.313".

## DEVELOPING A PEDAGOGY

A pedagogical approach was devised; this included wanting the materials to be:

- Suitable for first year computing undergraduates, that is, introducing basic library/information skills for novices. Always try to

bear in mind the needs of a first year student completing one of their first coursework reports.

- Encouraging (rather than confusing) – by encouraging the use of high quality information sources and instructing using jargon-free terminology.
- Integrated into a first year BSc Computing module on Blackboard, appearing seamless with the other module content.
- An interactive guide, so that students could follow basic instructions and then have the opportunity to practice each skill. The interactivity would come mostly from searching the 'live' environment using a split screen rather than using expensive and unnecessary multimedia gimmicks that might not be suitable for use with assistive technology.
- Linked to the students' coursework assessment and with agreement from the academic, it was decided that students would complete four tasks as 'evidence' of their engagement with the materials with a possible 10% of the total coursework marks available.

#### **PLANNING AND WRITING**

Some initial ideas and learning objectives were drafted in conjunction with the module leader. Five topics were identified each with their own learning objectives:

- Information searching (identifying appropriate information sources)
- Searching the web (comparing a Google search and a search using EEVL)
- Searching for textbooks (using the library catalogue)
- Searching for journal articles (using a database such as INSPEC)
- Referencing resources (compiling references using Harvard).

Discussions then began with the instructional designer who helped organise and adapt the materials for the online environment, ensuring that the learning objectives were achievable. Together with the instructional designer, ideas for suitable multimedia development were identified and commissioned, tasks were devised which formed part of the assessment portfolio and the long, iterative process of drafting and re-drafting the content began.

#### **PILOTING**

The materials were piloted with the module leader and members of LRC staff. A more suitable pilot group of computing students would have been identified but these were not available at the time of development. Comments were taken on board and changes made where practical.

Both editors from the e-learning services team worked on the materials, ensuring the house style was maintained.

#### **DELIVERY**

The academic introduced the materials at the relevant time (mid-autumn term 2003), in a tutorial slot with librarian support available to help students work through the first section in the class. The students completed the four tasks as part of their coursework which was marked in April 2004 by the module leader.

#### **RESULTS**

Evaluation involved a pre- and post-course questionnaire and an analysis of the report element of the student's coursework including the four tasks which formed part of the GIST materials. The pre-course questionnaire asked the students to assess their skills in searching for information. Problems inherent with this approach were that the students tended to overestimate their ability particularly with regard to web searching. In contrast, they were uncertain about searching the journal databases. Most students answered positively about their skills relating to referencing. Anecdotal evidence and the subsequent analysis revealed referencing to be a weak skill.

The post-course questionnaire used the same questions as the pre-course questionnaire with additional questions for comments. In most cases students rated an improvement in their skills and some evidence was found to support this in the coursework. Positive comments included:

- good information on referencing
- links to other sites with similar information
- help with finding journal databases
- easy to use
- easy navigation
- structured well
- quality information
- interactive features.

Critical comments included:

- referencing information could be easier to find
- boring
- the location of the link should be on front Blackboard page.

The report element of the student's coursework amounted to 30% of the total marks for the coursework. 10% of this was allocated to the completion of the four tasks within the GIST materials, together with evidence of relevant research and referencing.

The better and middle ranking courseworks included:

- evidence that the tasks had been completed well
- some good quality books, journal articles and websites had been found
- resources found had been evaluated
- resources were relevant to the coursework
- good bibliographies in the best reports but the information was not always referenced in the body of the text.

The poorer courseworks:

- did not include a bibliography even though students had found quality resources as part of the tasks
- used others work but did not reference it
- used very few journal articles.

evidence to suggest the material had been applied successfully. More work needs to be done to help students make the link between finding resources and referencing and acknowledging that they have used the resources.

Formative assessment could be built in to provide feedback to the students as they complete various activities. This could include the development of some online quizzes. The librarian could also provide online help and support through email and/or discussion fora.

The materials have the potential to be repurposed in a variety of ways, including being:

- integrated into a subject specific course or module
- provided as a general resource to help students acquire information searching skills
- developed for postgraduate students.

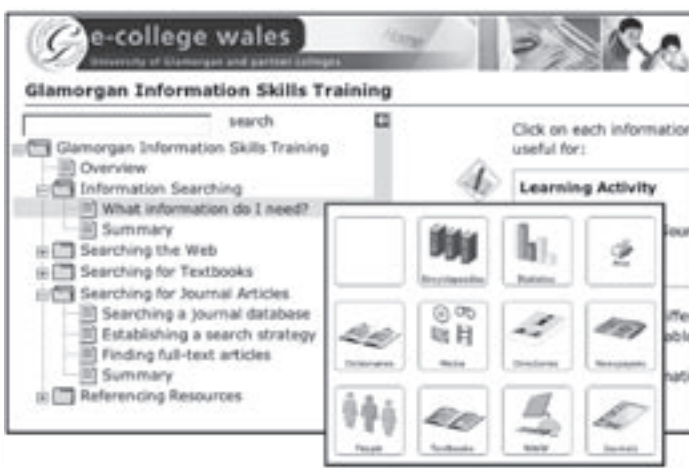
They have already been adapted for use in other subjects (for example in business and care sciences) providing information searching skills support for distance learners. Adapting the materials for different subjects has proved less time-consuming than the initial development and, providing access to the technical expertise can be retained, scaling the project should be feasible.

## CONCLUSION

The GIST materials are now available for students to use twenty four hours, seven days a week, both on and off campus, at whatever time of day or night is most convenient. It means that we as librarians are using our time more efficiently and can reach more students in a consistent manner, particularly those who are at a distance or are studying part time. The materials are also flexible, in that they can stand alone or they can be customised and integrated into a specific course or module.

On reflection there have been multiple benefits of working on the GIST project. In terms of personal professional development we have had the opportunity to put

together an internal bid document, to work collaboratively in a multidisciplinary team developing e-learning materials and we have gained skills in basic project management. In terms of the library service, the project has highlighted the information skills agenda within the university which is now seen as a key skill alongside numeracy and



## THE FUTURE

The materials will be improved by implementing minor alterations following feedback. The section on searching databases for journal articles was less successful than the other sections so will be revisited. Although students found the referencing section useful and clear there was little

IT skills. On a wider scale, there is in development within the university a set of online materials to support key skills which includes information searching and referencing. The project has also established the role of the library in helping students avoid plagiarism by publicising the fact that we can help them locate and reference high quality information. Invitations to become increasingly involved in departmental and university learning and teaching committees will enable us to further promote our role in the future of supporting students to locate the best and filter the rest.

#### **NOTES**

- 1 K. Moore & C. Abson, 'Really useful or virtually useless?' *Update*, 1 (8), 2002, pp 34-36.
- 2 The Big Blue project: <http://www.library.mmu.ac.uk/bigblue/>
- 3 e-learning services team forms part of the Information Systems and E-Learning Services Department within the university and comprises instructional designers, multimedia developers, systems developers and editors.