
University of Gloucestershire: impact of a WebCT-based information skills tutorial

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Introduction

The University of Gloucestershire project team was composed of four members of the Department of Learning and Information Services (LIS): Darren Bolton, John Hill, Rachel Cooper, and Ann Mathie.

We chose to assess the impact of our WebCT-based Information Skills tutorial across three year one subject areas: Computing; Education; and Environment.

Importance to the Department of Learning & Information Services

The online information skills tutorial was originally developed in 2002/03 and had subsequently undergone several minor revisions following feedback from students. However, it had not been formally reviewed. The IMPACT project therefore provided an excellent vehicle with which to review the tutorial.

We sought to promote its use within information skills sessions to both academic and Learning Centre staff, by raising awareness and disseminating good practice. Our Senior Information Advisers have utilised the tutorial in different ways within information skills training, and we therefore wanted to document these different approaches and assess the impact on our first year students' information skills.

Application of the Impact Implementation Methodology

What was the service trying to achieve

Our three primary objectives were:

- To promote the use and importance of the information skills tutorial to both academic and LIS staff
- To develop the abilities and confidence of year one students in information skills
- To provide and promote flexible access to information skills tutorials

Success criteria

Success criteria for objective one:

To promote the use and importance of the information skills tutorial to both academic and LIS staff

- Involvement of LIS staff in the planning process and delivery of information skills within school-based skills modules
- Evidence of positive feedback from academic staff
- Use of bibliographic evidence to demonstrate both the range and quality of information sources referenced
- Introduction of related training for LIS staff

Success criteria for objective two:

To develop the abilities and confidence of year one students in information skills

- Evidence of positive feedback from academic staff
- Evidence of student abilities, knowledge, and confidence obtained from the Information Audit

- Evidence gathered from formal assessment that the students have understood the concepts presented within the information skills tutorials
- Evidence of returning users to the tutorial outside the formal session

Success criteria for objective three:

To provide and promote flexible access to information skills tutorials

- Provision of a wide range of marketing tools
- Provision of flexible access for staff and students

Impact measures

Impact measures identified for objective one:

To promote the use and importance of the information skills tutorial to both academic and LIS staff

- Feedback from subject librarians and academics
- Documentation of LIS staff development sessions on the tutorial
- Quality of referencing and range of sources cited from sample range within each of the three subject areas

Impact measures identified for objective two:

To develop the abilities and confidence of year one students in the field of information skills

- Results from online assessment exercise
- Results from Audits
- Feedback from academic staff
- Results from WebCT of users accessing the tutorial on more than one occasion post session

Impact measures identified for objective three:

To provide and promote flexible access to information skills tutorials

- Documentation of methods used (e.g. posters, web, staff sessions)
- Documentation of Intranet access, record of user upload requests, returning users to the tutorial

Methods used

Methods used for objective one:

To promote the use and importance of the information skills tutorial to both academic and LIS staff

- *Email Questionnaires* - brief email questionnaires to Senior Information Advisers and academic staff to assess the level of Learning Centre involvement in the skills module planning process.
- *Bibliography exercise* - a range of bibliographies collected from each of our three sample groups and a scoring system applied to each to evaluate both the range and quality of information sources used.

Methods used for objective two:

To develop the abilities and confidence of year one students in the field of information skills

- *Email Questionnaires* - brief email questionnaires to Senior Information Advisers and academic staff to assess the impact of the skills sessions.
- *Pre and post session Information Audits* - to collect baseline data of student abilities pre-session and compare it with data collected from the second audit (post-session). To collect student feedback on the sessions and the tutorial from the second audit.
- *Usage Statistics* – collected from WebCT primarily to analyse the number of returning users to the tutorial.
- *Online multiple choice assessment* – analysis of results from the research skills test.

Methods used for objective three:

To provide and promote flexible access to information skills tutorials

- *Usage statistics* - collected from WebCT primarily to analyse the number of returning users to the tutorial.

Particular research instruments of interest

The two tools that have been the most successful in the quality of the data collected have been the information audits and the online multiple-choice research skills assessment.

- Information Audit

Two online information audits were conducted in October during the formal information skills session, and repeated later in December. All the original questions were included in the second audit, plus the addition of 3 further questions on the relevance of the information skills training to research needs. The time delay between the audits allowed the students an opportunity to embed their information skills within their course and therefore produce a more reflective assessment on the value of the library sessions.

Overall the responses demonstrated that the level of knowledge, confidence, and usage of key resources (library catalogue, journals, databases) increased as a result of using the tutorial. Likewise there was an increase in confidence in referencing sources. The general nature of responses from the second audit, when compared with the first, suggest that the tutorial has had a positive impact in the development of information skills across our three subject areas. However, we need to consider additional strategies for those students who gained little from the sessions.

Disappointing usage statistics across key resources (journals and databases) show that we need to consider how to market key resources more effectively both within the session, on the tutorial, and as a service in general. A significant issue is that one third of our students would like more training in these areas, which suggests that what we are currently providing is insufficient.

- Online Research Skills assessment

All students across our 3 subject areas completed this online multiple choice assessment exercise. The software used to produce the assessment exercise was *Questionmark*. The questions and examples in

each of the three tests were tailored towards the relevant subject disciplines, and in some cases towards particular assignments. All the questions were based around what had been covered on the tutorial. The test was open book. Our rationale was not only to assess what the students had learnt, but also to enable them to reinforce the knowledge gained during the sessions.

The results clearly demonstrate the effectiveness of the tutorial in helping to develop information skills at a basic level with approximately 50% of students getting 60% and over. It suggested that a good proportion of students were actively engaging with the tutorial at a high level and were able to transfer and apply more general concepts, as outlined on the tutorial, to their own subject area.

Significant results and how they have been used

Sub-standard referencing is an area that has been highlighted as needing attention across all subject Fields within the University. The results from the IMPACT project have gone some way towards proving that an integrated / context driven approach to information skills, using the tutorial and online test, has had a positive impact on student skills in this area, with a great deal of potential for future development. For example, evidence of the success of this integrated model has already led to discussions between the School of Humanities and their Senior Information Adviser, on introducing a similar approach to their skills module.

The audits have been particularly useful not only in comparing student development but also analysing their perceived areas of strength and weakness at the start of their Degree course. This together with the results from the test will enable us to review sections within the tutorial where students had difficulties, and modify our formal sessions to provide a greater emphasis on known problem areas.

One of the most interesting consequences of the project is in the area of flexible access to the tutorial, and how students and Senior

Information Advisers have used it. The project has allowed us time to review the tutorial and as a result alter our perceptions of how it could be used both as a teaching aid and an independent self-learning tool. This has enabled Learning and Information Services to make a further contribution to the University's widening access and participation strategy, with the provision of support mechanisms a key component for the success of this strategy. We have begun to advertise the tutorial more widely and have since branded it with a distinctive logo.

What has been learnt from participation

At the beginning of the project most of our team had little experience in this type of research activity. From a professional development perspective it has provided us with invaluable (if occasionally fraught) experience of the action research process, and much has been learnt from managing the whole process rather than any of its constituent parts. In addition it has reinforced the importance of the role of reflection in developing our practice, strengthened our professional relationships with academic colleagues and developed our critical abilities in assessing our own and others' research proposals.