Northumbria University: impact on improving students' confidence and competence in information and IT skills

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The Author section

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Introduction

The University Library and Learning Service (ULLS) already measure their performance by the usual parameters – recording various usage and performance indices, including a user satisfaction survey. By endeavouring to measure 'impact' however, this project offered ULLS a different opportunity - to gain a deeper understanding of the complex interaction between library users and library services and resources

ULLS decided to attempt to measure whether the Service was having an impact on improving students' confidence and competence in information and IT skills to support independent and lifelong learning. Northumbria University includes amongst its aims a commitment to developing the employability of its students and to promote lifelong learning to them. Specifically the University states a vision of all Northumbria graduates being able to demonstrate a range of transferable skills including "information literacy". It was hoped that a measurement of ULLS impact in this area would help to demonstrate the value added benefit of library services to the wider University community.

The project group recognised that this research related closely to the Jubilee Project (JISC User Behaviour in Information seeking: Longitudinal Evaluation of EIS) being conducted by the University's Information Management Research Institute (IMRI). The two departments therefore worked closely together on this Impact project using some of IMRI's research expertise and Jubilee methodology.

Application of the Impact Implementation Methodology

Impact measures identified / Success criteria

It was attempted to identify measures of students' confidence and competence in using IT and information resources. The service could be demonstrated has having a positive impact on students if they became more information literate after engaging with library services and the user education provided.

Evidence collected

The project set out to gather both quantitative and qualitative feedback from students on their perceptions and experiences of using the library and IT services. Data was collected from cohorts of 1st year and 2nd year business marketing students. The data gathered included students' perceptions of their own confidence in using IT and information resources and whether this changed over time. In an attempt to measure student information literacy competencies data was also gathered from students' assignment bibliographies.

Methods used

The project used some JUBILEE methodology in the form of questionnaires and focus groups. It also attempted to use research diaries and developed a method of bibliography analysis for the student assignments.

Particular research instruments of interest

The questionnaire provided some useful baseline information; student participation however, was a problem. This was also an issue for the focus groups and research diaries. Despite low participation rates the focus groups were very useful and gave us considerable insight into students' perceptions and behaviours. We would recommend that research diaries are only attempted where there is considerable academic staff support. In this case there was an unexpected staff absence and it was not possible to get student participation.

Bibliography analysis provided a convenient way of monitoring the students' assignments - useful as a surrogate for measuring the impact of the library on student learning. Once a methodology for this analysis was established, it was a relatively quick and easy technique to employ and allowed comparisons between different student groups. This methodology could usefully be extended to measure differences in longitudinal studies or between diverse student groups and varied academic disciplines. As a measure of library impact it is limited by the influence of many non-library variables on student citation behaviour. Unless

these factors can be isolated and controlled the impact of the library service will be obscured. It was however a valuable technique for exploring these issues.

Although some of these research methodologies could be employed in isolation from one another, it was using a range of data gathering mechanisms to triangulate results, which allowed a fuller picture of students' understanding and activities to be revealed. This did however make the study very time intensive.

Significant results and how they have been used

The students' use of information resources was strongly influenced by their academic tutors and was largely assessment driven. Students were reluctant to use scholarly resources such as journals unless it was a requirement of their assessment. The range of assessments that students undertake, including group and problem-based learning, means that there is not always a requirement for students to use scholarly information resources for their assessments.

The second year students used a wider range and quantity of information resources than the first year students and considered themselves to have better information skills than the first years. This was probably due to their wider experience, but also to some of the face-to-face user education that they had had from library staff.

Students were most responsive to library user education that was embedded in their curriculum, tailored to specific assignments and delivered at their point of need (in this case in their 2nd year of study). Thus, in order to influence students' use of resources and their information literacy, it is necessary to have close collaboration between academic and library staff.

The difference between the 1st year and 2nd year students would seem to show that they moved in a positive direction along an information

literacy continuum. The student feedback indicated that this was, at least in part, due to the library user education that they had received.

This study has informed ULLS activity and library staff have marketed services and resources to academic staff in a more focused way in order to indirectly influence students. Additional efforts have also been made to identify suitable core course modules across all the University programmes in which to embed information literacy skills.

What was learnt from participation?

This project revealed the complexity of the relationships with numerous factors affecting student's information literacy and they way that they engage with library services and resources. Many of these factors are extraneous to the library such as subject specificity and academic influence - especially mode of assessment.

Although benchmark measures were established by which impact could be measured longitudinally it is recognised that these are likely to be very specific to students' programmes and perhaps even to individual modules. This means that these impact measures are not readily transferable to other subject areas.

Although the project was valuable in improving our understanding of the relationship between students and the library it was very time intensive. Unfortunately it is therefore unlikely, that such a comprehensive study could be repeated.