Delivering an On-line Information Literacy Programme to Staff at Bradford Public Libraries: POP-i - a Case Study

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Introduction

This case study provides an outline of the Pop-i project, identifies its aims and objectives, its key audience and deliverables, and shares findings from a mainly qualitative research methodology.

POP-i was a collaborative non-commercial venture between Imperial College London (ICL) and the City of Bradford Metropolitan District Council, Library Service to develop an on-line learning programme for information literacy aimed at public libraries based on the instructional design principles created by ICL in their Information Literacy Internal Programme (iLIP). Some of the challenges expected were: developing relevant content for the public library sector; ensuring delivery was within an appropriate learning environment; gaining significant buy-in from a group of staff who are not familiar with e-learning. From a project management and professional development perspective there was, at the outset, a perceived benefit in the Higher Education (HE) sector working with colleagues from the Public Library (PL) sector and vice-versa.

Using data gathered through a range of methods, including interviews and focus groups, this study provides an overview of the issues and challenges encountered at a strategic, tactical and operational level and outlines some of the solutions that were found. Specifically, the area of focus for this case study centres on the delivery of a pilot learning programme for public library staff on the topic of information literacy. There is also a consideration of related issues such as: brokering the project partnership, managing the project, agreeing the IL content, choosing the VLE, versioning the content for a public library audience, the wider definition of IL in public libraries, using Moodle, gathering feedback, dissemination and planning future activity.

This case study outlines just one successful strategy for designing and delivering information literacy programmes. It is, in our case, based on the collaboration between a public library and a Higher Education institution. By recording the experiences of those involved, the key actors, the case study should provide a complete "story" of the process in a logical linear structure. The study is grounded in practical experience and thus provides a real-life account. It is exactly this action research approach, used within the project evaluation that lends itself well to the creation of a rich case study.

Brief description of the Pop-i Project

The concept of information literacy as an area of activity is well established in the education sector where it has put down firm roots associated primarily with the support of learning. Recently, in the light of national policy developments it is becoming more important for public libraries. Not only because of public libraries' increased engagement in learning as a valid and, some would say, natural activity, but also in view of the emerging digital citizenship agenda promulgated, with varying degrees of enthusiasm, by wider e-government policies.

In Bradford while many staff do have a level of competence in delivering what might be regarded as a traditional reference or enquiry desk service, there are challenges being presented almost weekly by new technologies, different media formats, and the sheer vastness of information being published. Traditionally the strengths of staff lie in paper-based resources, and while this is becoming less prevalent – inevitably the quest for appropriate information leads to on-line resources and it is in this area that there is a need to increase not only the skills of staff, but also, taking it one step further, to assist library users themselves to become information literate.

The Pop-i project was multi-faceted in its approach: part experimental, in the bringing together of partners from different sectors to focus on a new audience; part instructional design related, in reshaping and extending learning objects; and part technical development, in installing and maintaining a new VLE; and part political, in seeking to force the pace on the digital citizenship agenda. For a project of this nature one of the most difficult aspects of control is to delineate and constrain its scope while at the same time retaining an open mind . There were many interesting and related areas of endeavour into which our project could easily have crept, however agreeing a tightly defined set of aims ultimately ensured a clarity of focus.
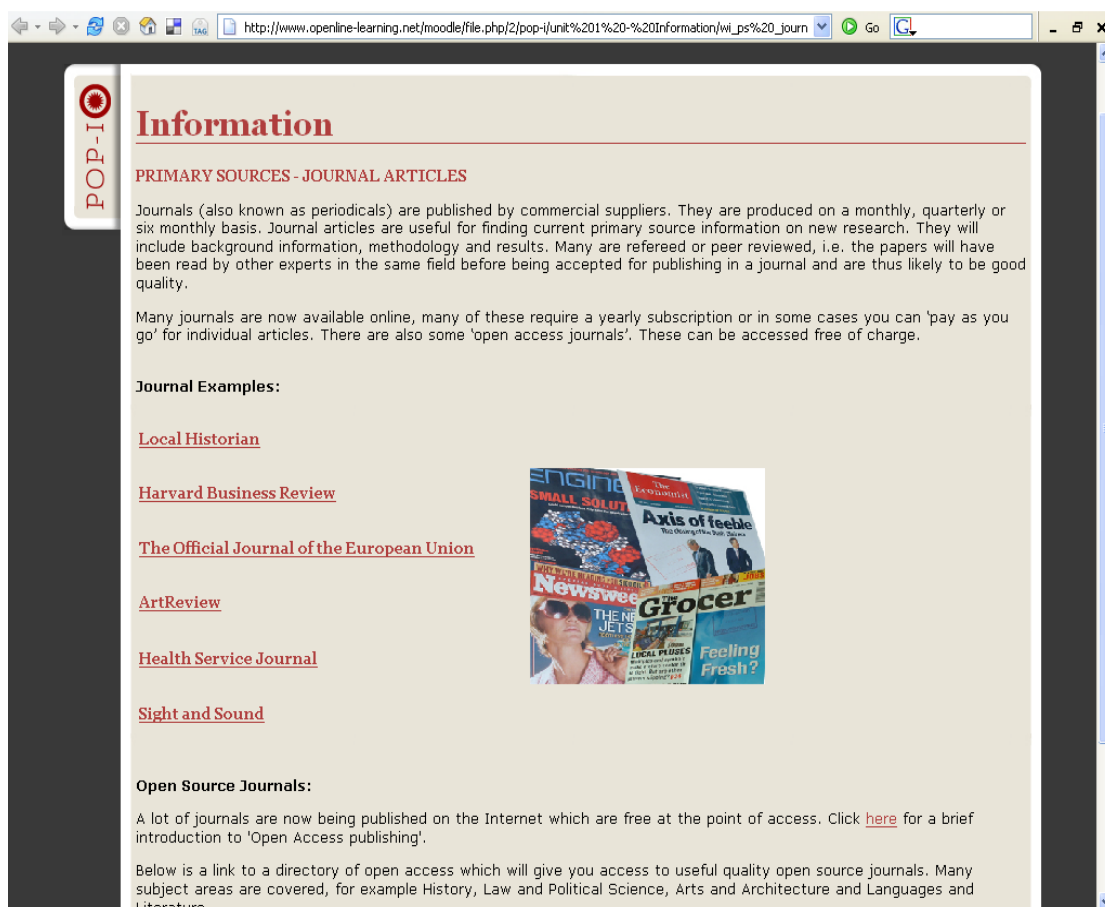
Running the Project

The project management approach followed, in general terms, guidelines by JISC (1). Although no formal funding was made available both partner institutions supported various aspects such as travel and meeting time. The project aimed to complete in one year and although there was some slight slippage caused in the main by a series of small delays rather than any one major problem, the slippage was easily contained within the allotted time. The quality of the project deliverables, essentially the objectives listed below, was to a sufficient standard and was judged by participants in their feedback, by the project managers and by senior staff within both organisations.

Aims:

🔸 To produce a fully functioning on-line tutorial on information literacy appropriate to the needs of staff working in a public library

🔸 To pilot the delivery of this tutorial to 20 staff, and to evaluate its usability and impact.

🔸 To develop a toolkit to enable staff to provide information literacy skills for library users

🔸 To disseminate the results of the pilot and evaluation, and to provide a demonstrator of better practice for other public libraries

🔸 To highlight the benefits and issues associated with working across the public library and Higher Education sectors.

Objectives:

- High quality e-learning content in the form of html pages interoperable with various VLEs
- A clear pedagogical approach appropriate to a range of learning styles
- A range of assessment exercises and learner support resources
- 90% of learners gaining tangible benefits from undertaking the programme
- An evaluation methodology appropriate to the development of e-learning programmes
- A toolkit for staff to utilise within a public library enquiry/reference setting

Fig. 1. A page from the Pop-i rendered in HTML and embedded with the Moodle Virtual Learning Environment.

The project dissemination strategy included the creation of a project website;(2) a final project report suitable for publication in a refereed journal; an interactive demonstration for presentation at conferences, workshops and study schools. (3)

Although the Pop-i project was a pilot with a small group of staff, it had been hoped from the outset that with favourable evaluation, a second phase of the programme would be rolled out to a wider audience and, in time, potentially to all 240 staff across Bradford Libraries, Archives and Information Service. The focus of the initial project was on raising staff awareness and increasing their knowledge of IL.

Technical Infrastructure

As noted above one of the first obstacles that needed to be overcome was the use of a VLE. Imperial College London use WebCT but it was not possible for this to be deployed within Bradford Libraries.

Alternative options were looked at and a decision was taken to use the Opensource software package Moodle which describes itself as "a course management system (CMS) designed using sound pedagogical principles, to help educators create effective on-line learning communities." (4) Some of the technical challenges presented by Moodle were difficult, due in the main to the fact that the project team had limited technical support, however, on the positive side the opensource development nature of Moodle has provided a hugely supportive international community which has been of great value. Once all of the content had been put into the Moodle CMS the navigation and usability testing was carried out within a closed user group.

Pedagogical approach

Recent research undertaken within Bradford Libraries had identified problems of learner isolation with the use of a previous on-line learning package. The notion of a learning community such as Moodle where peer support was expected and supported by its early adopters, appealed greatly to the library service's staff training and development group.

The learning modules provide a highly structured theoretical basis for understanding the principles of information literacy and this is underpinned with practical examples based on everyday library use. Learners were given the following outcomes as the outcomes of their learning

- understand why IL is important
- develop your understanding of the IL competencies which the library uses and recognise how these underpin your enquiry work with your customers
- be familiar with the library IL strategy

The Learners and the Learning

15 learners from across the Bradford Public Library Service (5) staff covering a range posts took part in the pilot programme having received an invitation letter that had been circulated to over 50 staff. Two tutors were used, both from the library staff but with experience in adult and Further Education teaching.

The learning comprised of 10 modules outlined here in Table 1:

Module 1 - Information	Module 6 – Acquiring, managing and storing information
Module 2 – Search & Retrieve	Module 7 – Using information ethically
Module 3 – Intelligent use of the Web	Module 8 – Referencing
Module 4 – Digital Resources	New Technologies Wiki
Module 5 – Critical Evaluation	The IL Toolbox

The modules was released one at a time over a period of 3 months. Most modules were open for a week while a couple remained open for two weeks. Each module followed a similar format and structure: an introduction followed by a series of pages offering learning materials with examples and explanations mainly text based with some illustrations. This was followed by a concluding section and, in most modules a short assessment quiz type exercise was completed by the learners. Each module had an interactive forum dedicated to the topics relevant to the learning points within that module. Learners were able to use this

forum to discuss various aspects of their learning. Additional to this was the provision of a poll or voting system which learners used to measure how much time they had spent on a module.

The learning modules were supplemented by the provision of a reflective journal facility. The reflective journals were an extremely important part of the project. They fulfilled two key roles: firstly they provided the learners with a framework through which they could reflect and deliberate upon their learning; second, as a method for gathering rich qualitative data, they were important for the project managers as part of their research effort.

The Pop-i learning programme also included an instant messaging system that was used enthusiastically yet sporadically by many. The live chat facility was used just once and this was deemed a limited success.

The summative assessments i.e. the quizzes at the end of each module were complemented by the use of a final exam type quiz at the end of the learning modules.

One of the key aspects of the whole programme in the eyes of those who developed it was the concluding IL Toolbox. The aim of this was to provide the learners with the tools to deploy information literacy within their working environment. In effect, providing the learners to put what they had learnt into practice. A key feature of the toolbox was a series of mini scenarios, usually illustrating how a specific need for information was identified and fulfilled using IL principles and techniques.

The contributions to the forum debates and the reflective journals were all archived and subsequently made available to the project managers to carry out this research.

Evaluation Methodology

The evaluation methodology used within the pilot project can be split into a quantitative and a qualitative approach. The quantitative approach was based in part on the Inspiring Learning for All framework. This framework uses Generic Learning Outcomes (GLOs) to measure the impact of learning in an informal learning setting. (6)

The learners undertook a pre-course questionnaire that was based on a the 5 general areas of the GLO . This exercise guided the learners to focus on what they wanted to achieve. A similar post-course questionnaire was also completed. Overall the use of the GLO generally recorded the perceptions of learners and revealed their attitude and motivations. This quantitative data was collated and, coupled with statistical information gleaned from the VLE forms an interesting overview of the learners' expectations and perceptions of the learning programme. The full report, in the form of an academic paper, a deliverable of the project, will in due course carry an in-depth analysis of this data.

Perhaps because it had a contextual basis, the qualitative information that was collected is of greater interest within this case study. Often it was personal to the learner and rather than reinforce any trend was more likely to throw up a new line of enquiry. These contributions were obtained through various means. The reflective journal contributions gave a clear insight into the day-to-day activity of learning and outlined how some of the anxieties felt by the learners were ultimately overcome. On occasions highly personal, these accounts provided an opportunity for the learners to reflect on their learning while at the same time provided the research team with a real flavour of the learning journey from the perspective of the learner. The on-line forums that accompanied each module were also revealing in that they provided the opportunity to witness the interactivity between learners. A focus group was held at the end of the project and this was facilitated by the researchers with 90% attendance from the learners. Lasting 4 hours the learners were split into groups

and were asked a series of open questions by the researchers. The groups were shuffled at various stages to ensure an opportunity for all participants to have their say. The focus group concluded with an unstructured open plenary discussion. The two tutors took part in the focus group and at various stages raised points of interest and provided observations unique to their role. Three months after the project completed three participants; two learners and a tutor, were again interviewed and various questions were asked specifically regarding the learning materials. These interviews were video recorded.

General Issues and Lessons Learnt

The amount of data both quantitative and qualitative that was collected was significant. Providing an analysis will in itself be a huge task. However, much of the qualitative information, captured by various means gives an immediate feel for the project generally. All participants completed their learning within the time allowed. The aims of the project were all met mostly in full, some in part. The level of engagement – measured through the log files in Moodle show that there was sustained interest in the learning for the planned duration of the programme. Again using the log files of Moodle it was found that learners accessed their learning across a wide range of timeslots – this tied in with the working patterns of a large group, with a smaller group accessing outside normal working hours. Learners engaged effectively and enthusiastically with the various learning tools within the VLE. The design of the IL units was given favourable comments in the focus group session. Particularly welcome was the opportunity to use the reflective journal. Between the 15 learners over the 13 week period some 17,000 words were written in the reflective journals. Again the use of the on-line forum seemed to be a popular way of sharing information and thoughts on how the learning was progressing.

The information literacy concept was embraced by the learners. They saw the relevancy of the concept as being a practical benefit to their everyday working life. For public library staff the module on plagiarism was seen as least relevant.

Conclusions

At a strategic level the pop-i project delivered a greater understanding to senior managers of the needs on the front-line of a public library service. The benefits of cross-sector working were recognised through the sharing of ideas and the opportunity for personal development through understanding a similar yet different library organisation. The problems encountered by the lack of VLE within the public library turned into opportunities to explore, evaluate, install and ultimately deploy Moodle. This enhanced the personal skills and knowledge of the project team. Both institutions have subsequently installed or migrated to Moodle.

Perhaps the two most positive outcomes of the Pop-i project have been the continued use and development of IL training in Bradford Libraries. Moreover the development of Pop-i into a real-life product called Lollipop has provided a way to deliver the benefits of the Bradford experience to many more organisations whether they are public libraries, academic libraries or museums.

Notes and References

(1)   JISC Project Management Guidelines
(2)   The Pop-i Project Website

(3)   [Pop-i Showcase Website](#)

(4)   [The Moodle Website](#)

(5)   For a detailed description of Bradford's Public Libraries, Archives and Information Service please see here www.bradford.gov.uk/libraries

(6)   [The MLA's Inspiring Learning For All Website](#)