ILB, an e-learning course for Hospital Doctors in the Regione Emilia Romagna: regenerating the medical librarian profession

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Abstract

Objectives. The ILB Project (Information Literacy in Biomedicine) funded a survey of the main information skills needs in Regione Emilia Romagna Hospitals; an e-learning course was devised in order to meet these needs. The purpose of this paper is twofold: 1) to explain the blended learning choice and its implications for the course 2) to show how these medical librarians could enhance their professional role in teaching through the use of the e-learning platform.

Methods. The ILB Project team decided to use the e-learning methodology to change the way in which Doctors are trained; this choice was done to improve compliance with the course, as the delivery is much more flexible in term of time and space. In addition, these medical librarians were extensively trained to interact with the course participants through the e-learning platform (Moodle), to answer questions and provide further teaching and guidance in person and online. Consequently, right from the start, the focus of the Project was on the co-operative use of new communication technologies.

Results. The Project achieved its two main objectives: to develop a new learning methodology for strategic information skills and to heighten awareness of the medical librarians' professional knowledge, supporting the Doctors' searching skills.

Conclusions. New learning technologies can be used to promote changes in a collaborative to teaching and support. ILB has brought about this important and successful development.

Introduction

ILB – Information Literacy in Biomedicine – is a project that was devised by hospital librarians working with Doctors in charge of Continuing Medical Education in the Regional Health Service Hospitals. In the Regione Emilia Romagna Health Service there is a long tradition of co-operation among hospital librarians; the co-operation led to the founding of the GOT Consortium (*Gruppo operativo per il trasferimento dei risultati della ricerca bibliografica nei servizi sanitari*) which negotiated the acquisition of electronic journals and databases licenses for its members.

The aim of the Project was to improve information literacy skills among the doctors and healthcare staff; a GOT survey in 2005,which focussed on the use of electronic resources in the regional

hospitals and healthcare services showed that, despite the wide range of available resources, usage was low especially in the area of the medical databases..

The Project Team has produced a course (the ILB course) in blended learning to be delivered on an open source e-learning platform (Moodle).

The present paper is focussed on the choice of e-learning for the course and on the training of medical librarians, a training for trainers course on the Learning Management System.

Overview of information skills teaching in Italy

Italian medical librarians regard consider training medical and nursing staff in the use of electronic resources as a part of their everyday work; academic medical librarians have a more extensive training program for to students before they graduate. Some Italian Associations and Societies (the Italian Cochrane Centre among the others) organize annual courses in information skills and evidence research.

Moreover, the "ECCE" project should be mentioned for its importance for online self training. ECCE ("Educazione Continua Centrata sulle Evidenze") is a project co-founded by the Ministry of Health and the Italian Drug Agency and supported by some publishing houses, offering 34 online, self-assessment tools/courses (1).

In general, e-learning is used more and more in the biomedical area, mainly for Continuing Medical Education. Many courses and modules are produced with the sponsorship of the pharmaceutical industry. Medical librarians are rarely involved in these CME e-learning courses, but support them with literature and the update of the research based modules.

Objectives

The main ILB Project goal, in its preliminary wording, was "the production of a self-assessment tool for information literacy skills"; in the second phase, the Project team agreed that it was very difficult to define an *a priori* standard list of skills, as the speed of change in the technological environment (and the number of available resources) is so high that the course would become very quickly obsolete. Therefore, the Project team agreed producing learning objects, whose aim is teaching basic information retrieval (2) from medical databases, e-journals and free search engines for a specific range of purposes.

Secondly, the e-learning context was chosen deliberately to introduce hospital librarians to a new teaching context – the Learning Management System virtual environment - and e-tutorship. The Project team's second objective was to give librarians new skills and communication knowledge, to enhance their efficiency in searching relevant information, and demonstrating its usefulness in a EBM oriented healthcare organization.

Methods

Firstly the ILB Learning Objects were produced, in order to fulfil the first three main reasons for information searching in a clinical environment: i) to find recent information about a

clinical/research subject ii) to update a research/clinical knowledge to write a scientific papers iii) to collect information for delivering teaching materials. These three areas were identified with the means an online questionnaire (3) delivered to all the healthcare staff of the regional hospitals involved.

The three Learning Objects have the following structure:

- Learning objectives of the module

- Content

- Resources

- Summary and questionnaire

The Learning Objects are SCORM 1.2 compliant; they contain the audio, the audio transcript, a glossary and demand some active actions by the participants; they comply with the accessibility criteria.

The modules were designed to be delivered in blended learning mode: they are used as a "scaffolding", as the librarian/e-tutor is free to update, enlarge on details and widen the content.

A regional workshop was organized to present the course modules and the proposed delivery (4).

The course for hospital librarians was organized and held in Spring 2008.

Our guiding principle has been to develop new teaching skills and a new attitude among hospital librarians. Briefly we found the Medical Library Association (MLA) criteria very useful:

"Teaching ways to access, organize, and use information to solve problems is an essential and ever-widening responsibility of the health sciences librarian. Effective instruction entails not only knowledge of the structure and content of specific courses and technology but also an understanding of and expertise in

- *learning theory and cognitive psychology,*

- *curriculum and instructional development,*

- *instructional systems design,*

- *educational needs assessment and analysis,*

- *learning style appraisal,*

- *instructional methodologies, and*

- *evaluation of learning outcomes."*(5)

The main objectives of the course were to introduce hospital librarians to the course and the Learning Management Systems' features (supporting users, forum, homeworks, etc.).

The course was delivered on the Moodle platform itself. The librarians (23 from 9 hospitals and institutions) studied the modules, edited the glossary and discussed further search strategies as examples/exercises for future course participants. They were trained to perform active e-tutorship (6).

3

Results

The librarians were very satisfied with the course. Immediately after the end of it, the Project team sent a request for accreditation of the e-learning modules to the CME Regional Committee: the course was awarded 25 credits, and so it is now possible to make it available to hospital doctors.

However, right from the start some major problems emerged: the computers used by the librarians were in most cases within hospital/institution intranets, which inhibited the use of some plugins or software in the Moodle platform; some librarians had to download plugins, and, in addition, ask for licenses to update the Microsoft Office (or other systems on their computers).

These problems proved to be the main barrier holding the course; in fact, at the date of the submission of the present paper, the first course to hospital doctors has not yet been held , because of technical problems due to the hospital firewall and the Flash version available within the hospital network.

Conclusions

The first positive conclusion of this experience has been the introduction of new tools for interactive teaching and learning. The librarians very much appreciated the new virtual environment; in addition, the ILB project provided the opportunity for training in the key areas of online courses.

When the technical problems have been overcome, it will also be possible to test the interactive features of the Moodle platform and, ultimately, use it both to answer specific subject request and for user training.

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