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# The future of librarianship:

## moving out of the library and into the faculty

### How problem-based learning is transforming the traditional role

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This article discusses how the trend towards new approaches in teaching and learning such as problem-based learning are radically impacting on librarians.

#### INTRODUCTION

As we all know, the role of the librarian is changing at a rapid rate and there has been a lot written about the 'blended librarian'. In addition to our traditional work we are now expected to have proficient IT skills so that we can exploit the multitude of subject databases and web resources available. New technologies and services mean that we also need to be adept in the promotion of resources to our users. In addition to all of this, a major part of our role is to teach users how to navigate their way around the new and ever-changing information landscape. In fact, it could be argued that the teaching role of the librarian is one of the most significant changes in the profession. Librarians are increasingly moving out of the library building and into classrooms and lecture theatres. Undeniably, the rise of information literacy over that past fifteen years clearly illustrates this shift in academic librarianship.

In the future this could continue to evolve in a way that integrates librarians fully into the academic community. Librarianship is not the only profession undergoing a period of change. Third-level education is also experiencing a shift, particularly in its approach to teaching and learning. In Ireland, the gap between second- and third-level education seems to be growing and many institutions are taking steps to address this. Coupled with a more competitive market within higher education, institutions are looking for more inno-

vative ways to approach teaching that will engage students, not only providing knowledge but also developing skills such as critical thinking and problem solving. One of these new approaches is problem-based learning (PBL). From a librarian's perspective, PBL engages students with information in a way that radically impacts on how they use the library.

### **WHAT IS PROBLEM-BASED LEARNING?**

PBL is an approach to teaching that centres on the students, encouraging them to take responsibility for their own education. Instead of traditional lectures where students are presented with information and then shown an example from practice, PBL begins with a problem. Students are divided into small groups, each with a role such as 'leader', 'time-keeper' or 'scribe'. Each group is assigned a member of staff who acts as group facilitator. The group is then presented with a problem from practice. For example, medical students may be presented with a patient in a doctor's office complaining of specific symptoms. Students discuss what they believe the 'problem' is about. They go through a brainstorming process where they identify what information the 'problem' provides them with, what information they already know that can be applied to the 'problem' and what information they do not know that they may need. By doing this they identify what are called 'learning issues'. After this initial session, students then search for information in order to satisfy their 'learning issues'. This means they must undergo independent, self-directed information seeking. They then return to the group to share information they found and apply it to the 'problem'. Key to all of this is the role of the group facilitator. Staff no longer deliver information to students but allow them to find their own way through the 'problem'. They guide students, ensuring they are focused on relevant 'learning issues' that will help them meet learning objectives. When PBL works successfully staff intervene very little and reading lists are rarely provided.

The PBL process equips students with many skills and opportunities, such as a peer learning environment, socialisation, communications and team-working skills, critical-thinking skills, problem-solving skills, the ability to integrate new knowledge and information-literacy skills. Many studies have shown that PBL has a significant impact on the way in which students use the library and develop their information-literacy skills.<sup>1</sup> In comparison to their traditional

curriculum counterparts, PBL students use the library more often and for longer periods of time. They ask more complex questions at information desks, use a wider range of resources, use online databases and journals from a much earlier stage in their academic career and are more discerning regarding all types of information, particularly the internet.<sup>2</sup>

### **BACKGROUND**

During the academic year 2004–05 I undertook a masters degree in library and information studies for which I had to write a minor thesis. When choosing a topic I decided to draw from personal experience and conduct a case study of the Veterinary Medicine Library in University College Dublin, where I had been working for the previous few years. The undergraduate veterinary medicine curriculum in Ireland had undergone a major review in the mid-1990s and as a result, PBL had been introduced into the first two years.<sup>3</sup> Within the library, we were all aware that PBL was having a significant impact; however, as often happens, this was anecdotal and there was no real evidence. My research covered three main areas: the impact PBL was having on students' information-literacy skills, the use of library resources (both physical and virtual) and the role of the librarian. Most of my findings supported those of other studies carried out around the world. Significantly, within PBL, the role of the librarian was shifting dramatically.

### **THE LIBRARIAN AND PBL**

When PBL was first introduced, the library and its resources became a fundamental part of the teaching and learning process. Because students were no longer expected to use just one 'core' textbook there was an immediate emphasis on the entire range of available information resources. The lack of reading lists in PBL meant that academics had to actively engage with the librarian in order to ensure appropriate resources were available. This meant that the librarian needed to have a full understanding of what students needed to know and which resources were most appropriate.

A key feature of PBL in the veterinary school is the continuing consultation between librarian and faculty. This consultation resulted in the librarian being invited to join the PBL module as a group facilitator. In turn, becoming a group facilitator has integrated the librarian's role into the academic community and has enabled the librarian to develop and adjust information literacy instruc-

tion (ILI) in a way that better suits the needs of the students.

Undertaking the role of group facilitator is a significant departure from that of the traditional librarian. The librarian is not only performing in a support or administrative role but is now also involved in delivering part of the academic programme. Inviting the librarian to become group facilitator happens for two significant reasons. First, PBL brings the library to the forefront of academic life, drawing attention to the skills, expertise, resources and services that the librarian can offer. Secondly, because group facilitators in PBL are not required to have any specialist subject knowledge but to guide students through the problem, librarians are often viewed as suitable facilitators.<sup>4</sup> Although, there is some debate about this in the literature, it is common to see librarians taking on the role of facilitator and this is often necessary in order to meet human-resource demands and to maintain a collaborative relationship between library and faculty.<sup>5</sup>

In the veterinary school, the development of a collaborative relationship between the library and the faculty resulted in a greater level of consultation and a much closer link between academics and librarian. As a group facilitator, the librarian is now present at faculty meetings, planning and evaluating the PBL module. When interviewed for my research, the librarian commented on a greater level of consultation and co-operation that may not otherwise have existed without PBL. This took the form of discussions with the librarian when PBL was first introduced in order to ensure that the library could support PBL, continually referring to the librarian regarding resources to support each of the 'problems' and developing the students' information-literacy skills so that students can fully participate in the PBL process.

PBL fundamentally changes the way in which students find and use information.<sup>6</sup> The lack of reading lists means that they become self-directed learners who need to pass through a series of steps in order to participate effectively in the PBL process. First, students have to identify what information they need. Then they need to identify the most appropriate resources in which to find that information and evaluate it in order to determine if it is reliable and relevant. They then must apply the information to the problem and integrate it into their existing knowledge in a meaningful way. Most significantly, this has to be achieved in a timely manner, so that the students are prepared for the next PBL session.<sup>7</sup>

Notably, when I was gathering data for my research, both the librarian and academic staff commented on how ILI is now integrated into the curriculum, as a consequence of PBL. Taking such an active role in the PBL module and having continuing consultation with faculty resulted in a joint decision to integrate ILI. The role of group facilitator made it possible for the librarian to observe students' needs and the resources they used. Alongside this, for the first time the librarian had a real insight into what kind of sessions and instruction would be most useful. For example, the librarian observed that students were more likely to use the internet for PBL. Therefore, ILI sessions were adjusted to include a greater emphasis on how to effectively search for reliable information on the world wide web. This resulted in ILI no longer being delivered as part of pre-semester induction but as an integral part of the PBL module. This instruction is now delivered during the first 'problem' so that it is received at the point of need and is more relevant and in context with what students are doing.

Faculty perceptions of the librarian have also shifted as a result of PBL. Staff observed the important role the librarian plays in the academic process. They realised that the librarian provides vital support, teaching students best practices such as selecting appropriate resources and verifying information by checking other sources. Because of the critical role that the library plays in PBL, it is commonplace for the librarian to become a partner in the academic process.<sup>8,9</sup> In the veterinary school, the introduction of PBL led to the effective integration of the librarian into the academic community in a way that had never happened before. The librarian is now involved in planning, managing, delivering and evaluating the academic curriculum, and these crucial developments have led to a much closer relationship between the library and faculty.

#### **MOVING BEYOND THE VETERINARY SCHOOL**

Once I had completed my masters in library and information studies I took up the post of liaison librarian for the school of nursing, midwifery and health systems. Within the first month of undertaking this new role I discovered that there was an academic in the school who was planning to introduce PBL into a postgraduate module. We met and discussed our respective interests and I was subsequently invited to participate. What was most significant about this invitation was the level of participation offered. I was involved from

the very beginning right through to the evaluation stage.

The first stage was to write the problems for the module. This was a fascinating process and it was extremely enlightening to be part of the curriculum design. Having involvement in writing the problems had several benefits, not just for me as the librarian but also for the academic. First, I had access to the specific learning outcomes for each problem. This enabled me to gain an understanding of what resources students were expected to use. For one problem, it had been anticipated that students would use a resource that wasn't held in the library at all. Without library involvement at this stage, students would have been unable to find the information and would not have achieved their learning outcomes. Secondly, I was able to suggest how some problems could be modified in order to allow students to develop their information-literacy skills. For example, we designed one problem in a way that required students to retrieve varying opinions on a topic. Consequently, students had to evaluate the information found in order to determine its usefulness.

The librarian's being involved at such an early stage also enabled the effective planning of ILI so as to deliver the most appropriate session at the point of need, making it as relevant and useful as possible. In addition to all of this, the academic commented on how beneficial it was to have the librarian involved. She expressed how academics can often be very linear because they are subject-driven. Having a librarian involved meant the problems became much more creative and innovative, forcing her to 'think outside the box'.

I was also involved in discussions regarding assessment. Although I didn't make any decision on assessment criteria, I was present at discussions about assessment. This provided a full understanding of what was expected from the students in terms of the quality, variety and quantity of material. Therefore ILI sessions were geared towards specific assessment needs. As assessment is often a driver for learning, this fully engaged the students.

Being involved in so much of the planning and development meant that it was natural for me to also take on the role of group facilitator and I reaped all the benefits experienced by the veterinary librarian. In addition, involvement in the planning stages provided a deeper understanding of the learning outcomes, which meant I became a more effective facilitator.

To evaluate the usefulness and success of the module we held a focus group. Facilitating this presented immediate feedback regarding students' information-seeking experiences and the usefulness of the ILI sessions. Interestingly, the feedback was in tune with other data relating to the undergraduate veterinary students. In addition, similar to the veterinary librarian, I continue to work closely with academics to develop this module. Furthermore, the library is now becoming involved in similar modules across the university in areas as diverse as diagnostic imaging and English.

## CONCLUSION

Although the literature concerning libraries and PBL is relatively small, there is a definite trend towards the integration of the librarian into the academic community. As trends in teaching and learning continue to shift towards more student-centred approaches there is a corresponding movement towards a developing and rewarding partnership between the library and faculty. This must be regarded as a positive development, even if it impacts on the librarian's role in a fundamental way. The worlds of information and higher education will continue to change and shift unpredictably. However, it seems that there remains a vital role for the librarian. Moreover, from experience and from what the literature shows us, these changes have resulted in a deeper understanding, acknowledgement, recognition and rewards for libraries and librarians and the crucial role they play in the academic community.

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