



# Piloting a dedicated information literacy programme for nursing students at Waterford Institute of Technology libraries

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## Abstract

**Purpose** – The purpose of this paper is to describe the pilot information literacy programme for undergraduate nursing students as recently developed at Waterford Institute of Technology (WIT) libraries. The paper outlines the background to the programme, discusses its design and delivery and summarises participating students' initial response to it.

**Design/methodology/approach** – This paper takes a broadly practical, case study approach in terms of recounting experiences of designing and delivering a dedicated information literacy programme for undergraduate nursing students at WIT.

**Findings** – Although the project is still at an early or pilot stage, the feedback from the undergraduate students who attended training is very positive. The fact that the programme was so well received in its first year of operation is encouraging and inspiring, going forward.

**Practical implications** – The paper should be of interest to anyone involved in developing information literacy programmes or in the supply of information to nursing students.

**Originality/value** – This paper is likely to be of practical interest to academic librarians, who are looking for a fresh approach to information literacy training for undergraduate nursing students at third level institutions of similar scale and size to WIT.

**Keywords** Information literacy, Academic libraries, Ireland, Instructions, Training packages

**Paper type** Case study

## 1. Introduction

According to Verhey (1999, p. 252), “the amount and complexity of information nurses are expected to manage continues to increase exponentially. . . it has been estimated that information relevant to nursing doubles every five years”. Despite this claim, and the fact that it is considered imperative that the nursing workforce be information literate (Wallace *et al.*, 1999), the literature shows that many nursing students underuse the information resources and tools available to them (Dorner *et al.*, 2001; Franks and McAlonan, 2007), the rationale being that they are “either intimidated by them, unfamiliar with them, or overwhelmed by what they consider to be the tremendous task of learning how to use them” (Pravikoff, 2000, p. 99).

In a bid to redress this imbalance and to overcome such perceived barriers to information access and usage, Waterford Institute of Technology (WIT) libraries in conjunction with the Department of Nursing at WIT have recently developed a pilot information literacy training programme for undergraduate nursing students. In contrast to our previous training initiatives, the uptake of which relied on nursing lecturers voluntarily booking their students for library classes and the students voluntarily attending them, the new programme is embedded across all years of the undergraduate nursing curriculum.

The main basis of the programme is that it follows a structured, tiered approach to information literacy training, whereby provision is made for all years and all levels. Ideally, this model will not only result in undergraduate nurses receiving regular



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library instruction across their years at WIT, but will ultimately also equip graduates with the necessary skills for future research and lifelong learning opportunities. This paper describes the background to our pilot programme, details its design and delivery and also reports on the students' initial response to it.

## **2. Background to the programme**

WIT Libraries learning support team is responsible for providing information literacy training to all students at WIT. This includes approximately 350 undergraduate nursing students. We have been concerned in recent years about the low attendance at the non-compulsory classes scheduled for nursing groups, coupled with these students' associated issues of information overload, which have been presenting themselves at the library information desk. In 2008, for example, the information desk received recurring queries from nursing students, often relating to basic and intermediate research problems that clearly indicated a need to address these issues with a revised information literacy instruction approach.

Following on from these concerns, a pilot information literacy programme was initially negotiated with lecturer representatives from the nursing department in mid 2009. Given that one of our main aims for the new programme related to increased accessibility for all nursing students, we took steps to integrate the library training sessions into the undergraduate nursing curriculum as part of the Enquiry and Research Skills module.

The Enquiry and Research Skills module is delivered across all four years of the undergraduate nursing curriculum. It is facilitated by a number of different nursing instructors and covers such subjects as manual handling, study, and academic writing skills. The module generally follows a workshop format and has a theoretical, as well as a practical and interactive focus. As will be elaborated on in more detail later in the paper, this aligns with the pedagogical approach adopted by the library learning support team.

In order to maximise attendance, the learning support team agreed to deliver training in the nursing computer laboratory, located in the nursing building, which is more convenient for students than the library classroom. The nursing lecturers explained to us that their students were already very familiar with the practice of formally recording their attendance at lectures and seminars through the use of a swipe record attendance system and that this attendance record is required in order to register with The Irish Nursing Board (An Bord Altranais). By bringing library training to the nursing department, we recognised that attendance at information literacy classes could now be formally recorded and could contribute towards the students' overall professional qualifications.

Hosting the training sessions in the nursing building also has further advantages: it makes provision for students running between tightly scheduled classes and provides them with familiar surroundings in which to engage with the library's information resources and consult with the librarian. Research (Van Scoyoc, 2003; Carlile, 2007) shows that this type of interaction ultimately helps to combat library anxiety issues as it provides students with an opportunity to develop a positive relationship with librarians outside of the library and leads to increased student usage of the service in the longer term.

## **3. Programme design and delivery**

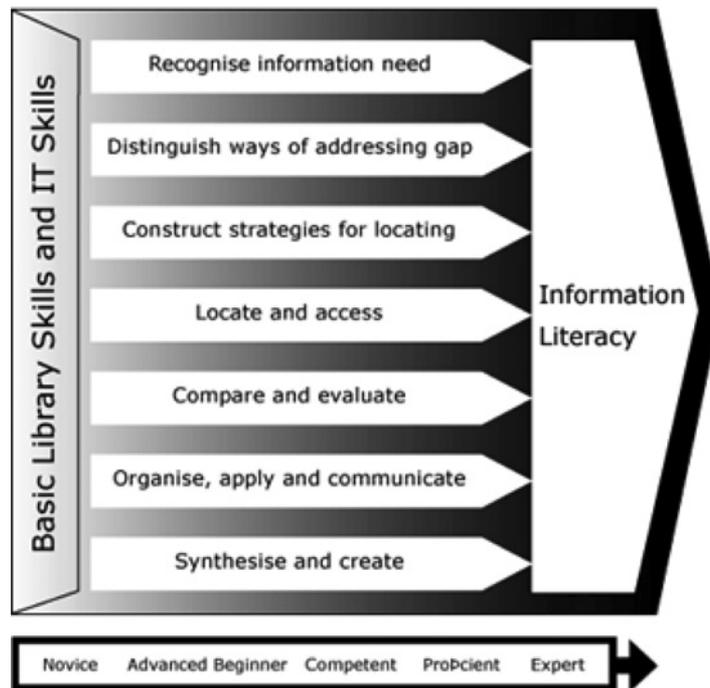
Two librarians (also the authors of this paper) took responsibility for designing the programme over summer 2009 and delivering it from September to November in the same year. The programme is broadly based on the SCONUL (1999) Seven Pillars' information literacy model, which oversees the progression of students from novice

(first year) to expert (final year) as underpinned by their achievement of a series of information literacy skills (see Figure 1).

Following the SCONUL model, the overall mission of the programme is to support the academic nursing curriculum by enabling all students at the end of their degrees to be information literate at an advanced level. In line, then, with Barnard *et al.*'s (2005, p. 509) claim that: "educational leaders within nursing need to ensure progressive development of information skills and the advancement of educational strategies that encourage regular use of information skills across an entire curriculum", the programme follows a four-stage approach, taking the undergraduate student on an information literacy journey from Year 1 through to Year 4.

This journey is no easy one: it involves the development among students of a range of transferable skills, including critical thinking, and reflective and research skills, all of which are key enablers of independent, self-directed, learning, and all of which "[help] the nurse become a lifelong learner, who has the capabilities to keep abreast of new developments in his/her field" (Tarrant *et al.*, 2008, p. 459).

From the beginning, although we were aware of the relevance of library training for all four years of the nursing curriculum, we identified Years 1 and 4 as key stages for information literacy instruction. Year 1 represents an often difficult transition period for students moving from second to third level education, while Year 4 students in their final undergraduate year are also at an especially critical phase in their academic careers.



**Figure 1.**  
SCONUL Seven Pillars for  
information literacy

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In recognition of this, we decided to provide comprehensive two-hour workshop sessions for each of these years in contrast to detailed one-hour refresher sessions for Years 2 and 3.

In conjunction with the nursing lecturers, we endeavoured to provide training for all years at “point of need”. This meant that sessions were purposefully timetabled immediately before clinical placements when the students had ongoing assignments and research projects to hand.

Details of each of the workshops are outlined below.

### *3.1 Year 1*

We envisaged Year 1 as the launching point for the programme and were optimistic that introducing students to the importance of information literacy skills at this stage would underline its value for research and practical decision making across their entire undergraduate careers.

Following the Seven Pillars model, first year students are equated with novices or beginners, who are undergoing a period of rapid and intense adjustment to college life (Tinto, 1993), and who are likely to feel both academically and physically lost in their new environments. These students need to be reassured by a welcoming, friendly librarian, who introduces them to the concept of information literacy in terms of basic or fundamental search skills.

The first year training session thereby primarily focuses on helping students to become comfortable and confident using the library. Students are encouraged to recognise their needs for information and to become familiar with the library’s print monograph and periodical collections, before being introduced to the basic concepts of searching databases and electronic resources. Similar to Goebel Brown *et al.* (2004); “we want[ed] the students to become familiar with the library, to ask questions and to realise that the librarians are a valuable resource [who] do not bite”.

### *3.2 Years 2 and 3*

We considered that further interventions in Years 2 and 3 would provide us with opportunities to continue to develop and expand on information literacy skills amongst students. We realised that students at these stages were likely to be experiencing ever increasing levels of information need, not only for academic assignments, but also for the practical fulfilment of nursing roles during hospital placements.

The second year library training session is a natural extension of the first year one. It focuses on helping students to construct preliminary search strategies for locating information across our range of healthcare databases and additionally recommended websites. It further encourages students to begin the process of comparing and evaluating the information retrieved. Following the Seven Pillars model, the second year students are depicted as advanced beginners. By expanding database searching and web evaluation techniques at this stage of their academic careers, students are empowered to become increasingly confident in terms of developing the information literacy skills initially introduced in first year.

These skills are further consolidated throughout the third year training session, which concentrates on developing advanced search and evaluation techniques among students. This stage of the Seven Pillars model refers to students as competent information users, who are familiar with the elementary research skills and are keen to develop these skills further in terms of filtering and evaluating the information that they find.

### 3.3 Year 4

Given that Year 4 incorporates a major research project, which requires students to produce comprehensive literature reviews, we are conscious that the refinement of information literacy skills amongst students is crucial at this stage.

By fourth year, it is assumed that students are well-equipped with the fundamental skills of information literacy, which are nevertheless reiterated and reinforced throughout the training programme. This session places a major emphasis on advanced search strategy skills and critical appraisal techniques, so as to ultimately develop students as “educated connoisseurs of research” (Wallace *et al.*, 1999, p. 137). Students are provided with opportunities to review, revise, and advance their information literacy skills and to develop their confidence and competence in terms of information management for their long-term nursing careers.

Following the Seven Pillars model, these students’ status equates with that of proficient practitioners on the way to becoming experts, who are well versed in information retrieval and evaluation, and who have an awareness and appreciation of their ever expanding information base.

In addition to running the individual training workshops for each year, we were very eager to promote the availability of follow-up assistance (in-person, by telephone, or e-mail) at the library information desk, and wanted to stress the value of this desk as an informal forum to gauge and address any ongoing research problems that the students may be experiencing either on or off campus.

## 4. Pedagogical approach

In line with WIT’s strategic plan (2007), which advocates a student centred approach to teaching and learning, the overall pedagogical vision for the nursing training programme is for students to take centre stage within the classroom, while the librarian becomes a facilitator or “guide on the side”, who directs them towards independent learning through active learning techniques.

This practical approach to information literacy instruction combines lecture and demonstration with a hands-on workshop to move learning beyond a purely passive model towards a two-way, reciprocal event. It relies on innovative teaching practices that make use of fun, practical reusable learning objects, designed to enthuse the student, and facilitate learning in an engaging, collaborative learning environment (Hegarty *et al.*, 2009, p. 81).

Following Chickering and Gamson’s (1987, p. 5) claim that “learning is not a spectator sport”, participating students are thus encouraged by means of group-based worksheet activities, discussion and dialogue to actively engage in the learning process, to talk about what they are learning, write about it, relate it to past experiences, apply it to their daily lives, and to make what they learn a part of themselves.

A case in point is the third year workshop, which asks students to work in groups to help the hypothetical student, Joe Bloggs to locate research material for his assignment on infection control. Following a demonstration on the working principles of the main nursing databases, students are divided into random groups, a database is assigned to each group, and the groups are asked to complete the worksheet based on their database. During this time, the librarian walks around the classroom taking questions, observing each group’s progress and offering suggestions where appropriate.

Students are assured that the worksheets are not graded or assessed, and that the librarian is available to help them with any questions they might have. This provides them with the security to experiment with the database resources for nursing as well as

the opportunity to initiate further discussion and debate with the librarian. Towards the end of the session, the class reconvenes as one big group. They are prompted by the librarian to share their search strategies and search results. The session ends with a discussion on the value of each of the resources to the task in hand.

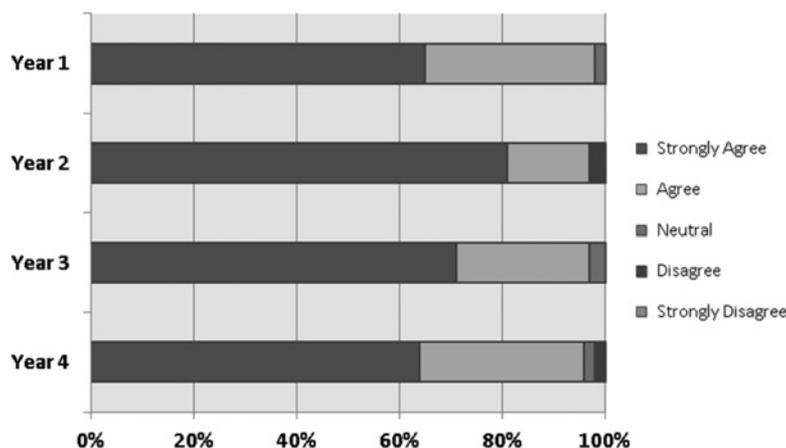
A similar worksheet approach is incorporated into the first, second and final year workshop sessions, with all worksheets tailored according to programme levels. In a bid to engage the students, we have made the worksheets as relevant and accessible as possible, basing them on topical subjects, such as the swine flu pandemic. In general, we have observed that the interaction intrinsic to the worksheet approach acts as a motivating force, and although some groups have had to be coaxed along, the majority of students are very open to actively participating in the training programme.

### 5. Feedback and evaluation

The programme was successfully piloted among nursing students from September to November 2009. Informal feedback from students and lecturers was very positive and library staff anecdotally reported more sophisticated levels of questioning at the information desk. In addition, a small-scale evaluation study was carried out to determine the success of the programme. This evaluation took the form of online surveys, which were administered at the end of each of the training sessions.

One of the key questions asked students from each year to assess the practicality and usefulness of the library training workshops they attended for their level. As outlined below, the results for each year were very positive.

As Figure 2 shows, 98 per cent of first year students either strongly agreed (65 per cent) or agreed (33 per cent) that the workshop they attended was practical and useful for their level. Meanwhile, 97 per cent of second year students either strongly agreed (81 per cent) or agreed (16 per cent) with this statement, with 97 per cent of third year students also in agreement – strongly agreed (71 per cent), agreed (26 per cent). Likewise, 96 per cent of fourth year students similarly either strongly Agreed (64 per cent) or agreed (32 per cent) that the workshop they attended matched their level. The fact that each of the groups felt that the workshops they attended adequately addressed their information needs in terms of practicality and usefulness is a strong endorsement of the pilot programme for the longer term.



**Figure 2.**  
This workshop was  
practical and useful for  
my level

Another key question asked students to rate the overall value of the library training programme as based on their individual workshop experiences. As outlined below, the results for each year were also very positive:

As Figure 3 shows, 100 per cent of the first year students rated the training programme very highly as excellent (62 per cent), very good (33 per cent), or good (5 per cent). Similarly, 100 per cent of the second year students also rated the training programme very highly as excellent (82 per cent), very good (13 per cent), or good (5 per cent). Likewise, 100 per cent of the third year students rated the training programme very favourably as either excellent (66 per cent) or very good (34 per cent), while 98 per cent of the fourth year students also rated the training programme favourably as excellent (60 per cent), very good (28 per cent), or good (10 per cent). These high ratings reflect the overall value of the training programme from the students' perspectives, and are as above a strong endorsement of the pilot programme for the longer term.

The overall feedback from each of the workshop sessions was similarly positive. Some examples of typical comments include:

Very good and very helpful.

Doing group work sheets help you to remember – well done (Year 1 students).

Very worthwhile and easy to understand.

Very helpful and it was explained in a relaxed and friendly manner. Well worth it.

Really informative and useful to me, thank you for your time in showing us how to use the library site properly (Year 2 students).

Very useful and relevant to my studies. Staff were friendly and very helpful.

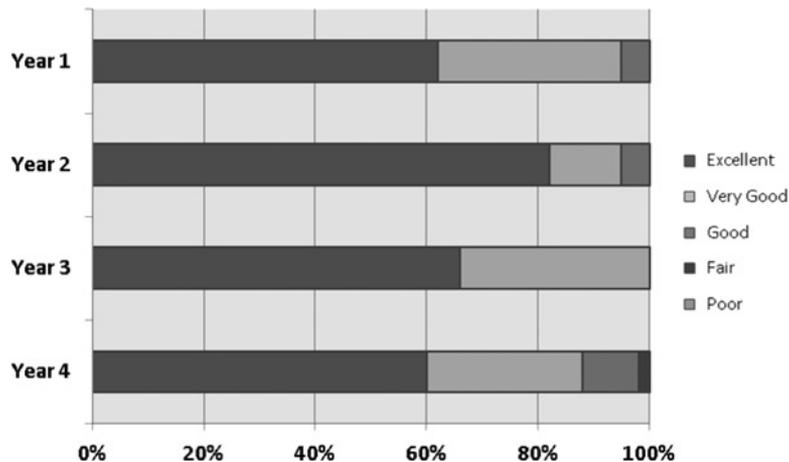
The handouts are also easy to follow and will assist me if I need help with databases in the future.

I feel that this type of training is invaluable. The information given is excellent.

I enjoyed this training session. I now have a better understanding – cheers (Year 3 students).

Training delivered concisely at a pace that was conducive to learning – thanks.

Very informative session – will prove very helpful (Year 4 students).



**Figure 3.**  
Please rate the overall value of the library training programme

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Further comments mostly reflected the timing of the sessions, with a number of final year students, in particular, recommending that the training be delivered from first year on:

Thanks a lot. I wish we could have had this kind of training every year from the beginning.

These classes should be part of every module of enquiry and research on the nursing programme.

This training should have been delivered from Year 1.

These comments are telling: they not only reflect our own sentiments exactly – that nursing students need dedicated information literacy training across their entire undergraduate careers, but by pinpointing some of the issues we have addressed in terms of the pilot, also serve to reinforce the value of the present programme going forward:

Because information literacy forms the basis for lifelong learning, not only should it be a part of the basic course in the first year, but also students should be encouraged to continue building upon their information literacy skills throughout all 4 years of college . . . Students' information literacy skills should be developed as they progress both horizontally and vertically through the college curriculum (Meyer *et al.*, 2008, p. 31).

## 6. Conclusion

In order to overcome the information overload often experienced by nursing students, this programme is very much concerned with helping these students to become comfortable and confident using the library and its print and electronic resources. It is based on familiarising students at an early stage with the key library resources available to them, and reminding them throughout their undergraduate careers of the value of these resources, so as to ensure consistent levels of information literacy skills among graduating nursing students.

In line with the nursing curriculum at WIT, the programme takes a workshop approach to incorporate a theoretical as well as a practical and interactive focus. Students take centre stage within the library classroom: they are provided with the opportunity to interact with their peers and to be scaffolded in their learning by a librarian. Following the theory that “nurses need to be discerning information consumers in order to acquire knowledge and skills in relation to their jobs and social roles and as participants of a democratic society” (Cheek and Doskatsch, 1998, p. 243), students are ultimately empowered with the requisite information skills to locate and evaluate research for their assignments and for practical decision making in the workplace.

The feedback in our first year of operation has been extremely positive with survey results clearly indicating that the pilot programme was very well received across all years. This encourages and inspires us to continue to offer the programme for the foreseeable future.

## References

- Barnard, A., Nash, R. and O'Brien, M. (2005), “Information literacy: developing lifelong skills through nursing education”, *Journal of Nursing Education*, Vol. 44 No. 11, pp. 505-10.
- Carlile, H. (2007), “The implications of library anxiety for academic reference services: a review of the literature”, *Australian Academic and Research Libraries*, Vol. 38 No. 2, pp. 129-47.
- Cheek, J. and Doskatsch, I. (1998), “Information literacy: a resource for nurses as lifelong learners”, *Nurse Education Today*, Vol. 18, pp. 243-50.
- Chickering, A.W. and Gamson, Z.F. (1987), “Seven principles for good practice in undergraduate education”, *AAHE Bulletin*, Vol. 39, pp. 3-7.

- Dorner, J., Taylor, S. and Hodson-Carlton, K. (2001), "Faculty-librarian collaboration for nursing information literacy", *Reference Services Review*, Vol. 29 No. 2, pp. 132-40.
- Franks, H. and McAlonan, C. (2007), "Establishing library 'key skill' confidence levels amongst a cohort of nursing students at an English university", *Nurse Education in Practice*, Vol. 7 No. 4, pp. 258-65.
- Goebel Brown, A., Weingart, S., Johnson, J. and Dance, B. (2004), "Librarians don't bite: assessing library orientation for freshmen", *Reference Services Review*, Vol. 32 No. 4, pp. 394-403.
- Hegarty, N., Carbery, A. and Hurley, T. (2009), "Learning by doing: re-designing the first year information literacy programme at Waterford Institute of Technology (WIT) libraries", *Journal of Information Literacy*, Vol. 3 No. 2, pp. 73-90.
- Meyer, K., Hunt, S., Hopper, K., Thakkar, K., Tsoubakopoulos, V. and Van Hoose, K. (2008), "Assessing information literacy instruction in the basic communication course", *Communication Teacher*, Vol. 22 No. 1, pp. 22-34.
- Pravikoff, D. (2000), "On the information highway, or sitting on the curb", *Journal of Nursing Education*, Vol. 39 No. 3, pp. 99-100.
- Society of College, National and University Libraries (SCONUL) (1999), "Briefing paper: information skills in higher education", SCONUL Advisory Committee on Information Literacy, London, available at: [www.sconul.ac.uk/groups/information\\_literacy/papers/Seven\\_pillars2.pdf](http://www.sconul.ac.uk/groups/information_literacy/papers/Seven_pillars2.pdf) (accessed 5 November 2009).
- Tarrant, M., Dodgson, J. and Law, B. (2008), "A curricular approach to improve the information literacy and academic writing skills of part-time post-registration nursing students in Hong Kong", *Nurse Education Today*, Vol. 28, pp. 458-68.
- Tinto, V. (1993), *Leaving College: Rethinking the Causes and Cures of Student Attrition*, University of Chicago Press, Chicago, IL.
- Van Scoyoc, A. (2003), "Reducing library anxiety in first-year students: the impact of computer-assisted instruction and bibliographic instruction", *Reference and User Services Quarterly*, Vol. 42 No. 4, pp. 329-41.
- Verhey, M. (1999), "Information literacy in an undergraduate nursing curriculum: development, implementation and evaluation", *Journal of Nursing Education*, Vol. 38 No. 6, pp. 252-9.
- Wallace, M., Shorten, A., Crookes, P., McGurk, C. and Brewer, C. (1999), "Integrating information literacies into an undergraduate nursing programme", *Nurse Education Today*, Vol. 19, pp. 136-41.
- Waterford Institute of Technology (WIT) (2007), "Strategic plan 2007-2010", available at: [www2.wit.ie/AboutWIT/StrategicPlan/FiletoUpload,19822,en.pdf](http://www2.wit.ie/AboutWIT/StrategicPlan/FiletoUpload,19822,en.pdf) (accessed 5 November 2009).

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