

ILS and RTP: Support to Researchers provided by Information and Learning Services as part of the Research Training Programme at the University of Worcester, Past, Present and Future.

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Abstract

The purpose of this article is to investigate the involvement of Information and Learning Services staff in the delivery of the Research Training Programme at the University of Worcester, UK with a focus on researcher receptivity. I believe that by constantly reflecting on the development of that part of the programme delivered by ILS and by examining feedback from the sessions, it is possible to improve and increase the level of researcher receptivity. It is hoped that such examination and reflection will be of value and relevance to the IL community since by reflecting on success and failure in a local context and by mapping this reflection to existing research enables librarians to improve the support provided to researchers within their institutions. This article outlines the support given to research students at the University of Worcester in the past, examines the changes leading to present programme delivery and reflects on considerations for future support. The article is underpinned by reference to current research undertaken in international (albeit Western-centric) contexts. I note that the rationale behind changes is embedded in current adult learning and teaching theory. In an increasingly competitive research environment where funding is dependent on a statistically monitored research output, the aim of such support is to integrate any IL contribution into the wider research training programme. Thus resource discovery becomes part of the reflexive research cycle. Implicit in this investigative reflection is the desire of the IL community to constantly strive towards the positive reception of IL into research support programmes which are perceived by researchers as highly valuable to the process and progress of their work.

Key words

Research support; Researcher training; Doctoral studies; Postgraduate information literacy

Introduction

This article is concerned with the development of information literacy as an embedded element of the Research Training Programme (RTP) at the University of Worcester (UW) and with factors affecting student receptivity. It does not therefore address the content of the sessions in detail. Lesson plans indicative of contents can be found in Appendix A. I have indicated past, present and future support for research students at Worcester since information literacy has been integrated into the research training programme for approximately twelve years, therefore it is possible to trace a clear path of progression, adaptation and development, and to assess some factors affecting student receptivity.

Information and Learning Services (ILS) is an integrated service comprising Library, IT and Media services. The initial inclusion of the Library service in the RTP was agreed with the member of academic staff working within the Graduate Research School and responsible for the programme. The targeted audience was both full and part time research students undertaking doctoral research and working towards either a PhD or an MPhil. Taught masters students have always been supported through the relevant Subject Librarian.

The period investigated in this article runs from 1998 – 2009, during which time the research student profile has not significantly changed. There is a core of full time research students

the majority of whom are early career, post masters individuals. Approximately 40% of the research student body are part time. These part time students are predominantly mature individuals who are working whilst pursuing further study. The subject profile of this student body is cross-disciplinary.

In terms of Research Support, 2008 saw a major development. The growing research agenda within the University of Worcester instigated a review of research and research support across the Institution. The application for Research Degree Awarding Powers was the driver for this review. A Research Support and Development Officer based in the Graduate School was appointed. Within ILS the creation of a Research Team (to include management of Research Collections, the Worcester Research and Publications Repository (WRaP) and support for research students, staff engaged in research and researchers in Partner Colleges) was the result of a growing and recognised need for researcher support. In 2009, the University of Worcester was recognised in both the national and the educational press as the fastest growing institution in the country. This trend is reflected in the number of research students which has grown from approximately fifteen in 1998 to ninety seven in 2009.

Research Student Support 1998 - 2008: the Past

The RTP began in 1998, at which time the Graduate School supported approximately fifteen research students. From the inception of the RTP library staff have been involved in the module plan. The information literacy element was and is included in the module validation. Any new module within the university has to be validated by a committee. The inclusion of an information literacy element within the module means that, since the module is mandatory, the library does not have to encourage the tutor delivering the RTP module to fit in non-mandatory information literacy sessions. Thus the library contribution is not an optional extra for the students. At the beginning of the RTP, library staff delivered first one, then two information literacy sessions. The content of the earliest session included orientation and introduction to library services, an introduction to electronic resources and an introduction to efficient internet searching.

Evaluation of the sessions was achieved by using feedback forms distributed at the end of each session. These forms asked specific questions relating to improved awareness of resources available in addition to the opportunity to feedback any other comments and suggestions as to how the session might be improved. Information provided informed subsequent planning.

The use of bibliographic software was included as a separate session from 2004, before UW had a site licence for any such software. The session therefore introduced students to the bibliographic software by demonstration on an individual PC. Students were encouraged to purchase their own bibliographic software which was available at a discounted rate.

Initially (1998-2003) the RTP training was delivered on a series of Saturdays in order to accommodate the work commitments of part-time students. The majority of the full-time students were flexible and able to accommodate weekend training.

Between 2004 and September 2008, the RTP was delivered on a Friday evening between 6 and 9 pm. The student profile remained approximately 40 % part time. Their ages ranged from 21 to 80. The session timing was changed from Saturday to Friday evening in order to accommodate the teaching commitments of academic staff delivering other elements of the RTP. The impact of this timing on student receptivity was that concentration levels were

lower mainly due to fatigue at the end of a demanding week. In addition to the wide range of competence and familiarity with the use of computers for resource discovery the session leader needed to be prepared to deliver differentiated activities. The content of the session had to be well-paced and above all perceived as immediately relevant to student need from the outset. An extra member of staff to give individual attention when required was essential to the success of the session. The Past situation at UW was very positive in view of the difficulties encountered by librarians at other institutions, noted in conversation with colleagues from those institutions, namely, the difficulty of persuading their academic staff to embed mandatory information literacy sessions in research student training. One example noted in the ALISS Quarterly report (Alderson-Rice, 2010 p.33) was the allocation of a single session of 55 minutes as the single slot for postgraduate student training in Brussels.

In summary, past library provision of information literacy training to research students consisted of one session initially, then two sessions, the second a bibliographical software demonstration, both delivered within the existing RTP.

Research Student Support 2009: the Present

When the Graduate School based Research Support and Development Officer took over the RTP in 2008, part of his remit was to rewrite and deliver the training module. He included library staff from the newly formed Research Team from initial planning to final delivery.

The current RTP is designed for Stage 2 researchers under the Seven Ages of Research model designed by Moira Bent, Pat Gannon-Leary and Jo Webb (2007 p.85), that is 'Doctoral students.' Programme and session planning are based on, 'situating the doctoral learner rather than information literacy skills at the centre of the discussion' (Green and Macauley, 2007 p.320). The new cohort of students in September 2009, fifteen in number, were consulted as to the timing of the RTP. The Research Support and Development Officer sought to maximise student receptivity by delivering sessions at the time most convenient to the students. Since they were consulted and came to a consensus within the cohort, their ownership and involvement with the RTP was established at the beginning of the module. (This consultation was on timing only since the content of the RTP had already been established in the module validation process explained above). Thus the RTP currently runs in the early evening on the day most convenient to the students. During the planning process, the Research Support and Development Officer and the Research Librarian discussed whether full time and part time students should have separate sessions and how such sessions might impact upon student receptivity. Whilst recognising these groups have some different needs, cohort numbers for each have not yet reached the critical mass of fifteen per cohort which is needed to enable provision of such targeted sessions. Also students in previous cohorts noted that they preferred a 'mixed' cohort in order to build and maintain a localised, physical Community of Practice helpful for mutual support during their student experience. The comments they made were in the course of informal conversation and within the Student Forum, an arena where students are consulted about issues relating to their experience, rather than the result of a formal survey or organised group interview. Rosemary Green discusses the benefits of the cohort as community in order to foster 'common purpose, mutual engagement and shared repertoire of resources and practices. In Green's article 'Fostering a Community of Doctoral Learners' (Green, 2006 p.170) the benefits of such a community are applied to both the existence of a physical community, that

is where the students are able to meet in person, and a virtual community in which the students participate in an online forum.

Although this article does not discuss details of session content, since it is constantly being reassessed in order to meet the needs of successive cohorts of students, I would like to mention one foundational principle that is applied to all sessions, that is the contextualisation of the material presented. According to Knowles theory of andragogy, (Knowles, 1984), adult learners' need to know why they need the learning presented to them. To contextualise research training in information literacy as integral to the success of the research process as a whole supports the endeavour to integrate information literacy into the overall training programme. Competency in information literacy contributes to the researcher's understanding of 'the complex and sometimes incoherent process and rationale for research' (Green and Macauley, 2007 p.327). This quotation foregrounds the existence of an 'incoherent' phase within the research process, often at the beginning of a major research project such as a PhD. Information literacy helps to resolve this 'incoherence' since the resources discovered enable the researcher to recognise trends in the literature available. She is thus able to formulate a structure or framework within which her thesis can begin to take shape, that is, to become 'coherent'. Green and Macauley have articulated this as a cyclical process of 'gathering, organising, reflecting and synthesizing' (Green, 2006 p.176). Throughout the training sessions, information literacy is therefore placed within the wider context of this cyclical model of research with the intention that it is accepted by the students as integral to the research process.

After running the first restructured RTP in September 2009, the Research Librarian continued discussion with the Research Support and Development Officer on further embedding the Library contribution into the wider Programme. To date the result is a shared second session. The Research Support and Development Officer presents a general introduction on referencing and plagiarism prior to a hands-on bibliographic software training delivered by library staff. The intention is to integrate the library contribution into an existing session and work towards closer collaboration. Collaboration in this context means working with the Graduate School Officer to plan and deliver the RTP sessions. The benefits of collaborative delivery is discussed by Bent, Gannon-Leary and Webb (2007 p.93), who emphasise that collaborative delivery is not only beneficial to student receptivity in terms of student concentration but more importantly sends a message that 'the Library' is integrated into other aspects of training, that is, the wider remit of the research process. Thus a collaborative approach encourages 'an understanding of information as a process of discovery and constructing meaning' (which is the wider remit of the research process) 'rather than a process of accumulating' (Green and Macauley, 2007 p.328). Webb et al note that 'an understanding of the research process because we are ourselves researchers' (Webb et al., 2007 p.222) is recognised and students are therefore more open to training offered. Other researchers such as Michael Moss and Gail Craswell (Craswell, 2007) not only emphasise the potential need for fundamental change but also the necessity for greater collaboration 'between the academy and information professionals' (Moss, 2008 p.125). Craswell is more specific as to who should be collaborating when she discusses 'the need for liaisons between graduate school offices, academics and librarians' (Craswell, 2007 p.93). The reasons given for the benefits of such liaisons which lead to collaborative working is that the Library is then seen to be integral to the academic process.

PILOT: An Online tutorial

Underpinning support for the material encountered by students in the face to face sessions is provided in the form of a Postgraduate Information Literacy Online Tutorial (PILOT). This tutorial was adapted from the programme developed at Imperial College London, with permission from the authors of the programme. At the UW, PILOT sits within the Blackboard VLE and was initially launched in 2008 to all research students under the title PILS (Programme of Information Literacy Skills). The PILS tutorial has since been renamed and revised to appear in its current format as PILOT. Feedback on the impact and use of the tutorial was collected informally in the initial instance. This was not a formal survey; an email was directed to the 2008 cohort of research students in order to gauge student reception of the tutorial. Approximately 30% replied. The responses showed that none of the responding students used the programme on a regular basis and the majority never used it. Since the research students do not have to use Blackboard on a regular basis they were not motivated to go into the VLE only to consult the tutorial. Thus the feedback from this informal email survey indicates that research students have not yet realised the wealth of information contained within the tutorial.

Following consultation on the possible provision of a similar research support tutorial for staff, the decision was made to use PILOT to serve both research students and staff within UW. This decision was made with the following rationale: since academic staff and many support staff are also postgraduates, that is, they have completed some form of postgraduate study, the term Postgraduate in the title adequately covers both research students and research active staff and can therefore be promoted to both groups. Since a significant proportion of part time doctoral students are also academic staff in post at UW and most of the full time research students contribute to teaching in their specialist area, the research staff/student groups do not have fixed boundaries at UW.

The PILOT programme has not been fully launched at the time of writing. Due to major staff restructuring a decision was made to delay the launch of PILOT until the new academic year 2010. As a result of this decision there is currently no data available on the impact of PILOT on the research community.

Research Student Support: The Future

To date, ILS and the Graduate School undertake shared planning, sessions embedded in the RTP and a small beginning in shared delivery. The aim of Library staff delivering information literacy sessions in the future is to extend collaboration beyond the Graduate School to include academics in the delivery of these sessions.

When the module runs for the new cohort of research students in October 2010, Library staff delivering the three sessions plan to invite a member of academic staff into the third session. This session includes an introduction to the Worcester Research and Publications Repository (WRaP), to which the academic concerned contributes and proactively promotes by linking his publications in WRaP to his personal online CV and his blog. Such links in the collaborative chain model the aim to foster an understanding of information literacy as integral to the cycle of 'gathering, organizing, reflecting and synthesizing' (Green, 2006 p.176) which is research.

Although I have focussed on support to research students registered on the RTP, all the above is relevant to supporting the researcher anywhere in the institution or in any of the UW Partner Colleges. Therefore, a key element of future support is to run sessions for, and to promote the PILOT tutorial to Partner College staff. In 2009, the Research and Partnerships Manager planned a taster support session for this group in collaboration with the Academic Liaison Team. Future plans include wider provision and promotion of such sessions. Delivery will be shared between the ALT and the Research Team. In the next academic year (2010), the aim is to provide such research support sessions more frequently and to include the academic staff member as advocate for the wider benefits of WRaP.

Factors Affecting Student Receptivity

An article written by Faye Miller includes discussion of 'motivating and demotivating factors' (Miller, 2008 pp.262-264) for researchers seeking information. The Motivators and Demotivators noted by Miller are:

Motivators

- ❖ Time savers
- ❖ Current awareness of relevant information
- ❖ Engaging presentation of information

Demotivators

- ❖ Information overload
- ❖ Not knowing where to look for information
- ❖ Changes to database and website design constantly changing

(Miller, 2008 pp.262-264)

Although Miller's research focuses on a specific subject group of students the results of the research she carried is supported in a broader context by the work of the Research Information Network on services to researchers (RIN/CURL, 2007) and barriers to research encountered in an academic context (Network, 2009). Since the whole of these two reports address these issues I have cited reports in their entirety. In addition to the above demotivators, difficulties encountered when attempting to access the full text of resources once they have been identified can be added. The most recent RIN report (Dec 2009) details such difficulties (Network, 2009). Delivering training in order to address the 'motivators' and to eliminate the 'demotivators' cited above is the challenge that sharpens the focus of planning for content and delivery of any session in order to heighten student receptivity, since researchers themselves have identified what is motivational or demotivational for them. Miller's work also poses a number of unanswered questions on the subject of 'research literacy' (Miller, 2008 p.266) which are beyond the investigative remit of this article.

Student Receptivity and the Skills Audit

In order to address Knowles' posit that adult learners' need to know why they need the learning presented to them (Knowles, 1984), the first information literacy session starts with

a Skills Audit exercise. A copy of this exercise can be found in Appendix B to this article. The students are requested to answer all the questions except the final one. The final question on the Skills Audit exercise is 'Have you identified any areas where you would like to improve your skills?' The students are asked to answer this final question after completing all three training sessions and to hand the sheet to the Librarian. Feedback received from these responses can not only be used to identify gaps in knowledge and competence which inform the planning of subsequent sessions, but they also provide evidence to show that self-identified lack of knowledge increase attention to and appreciation of the content of the sessions provided. This evidence comes through in the final comments on the Skills Audit exercise. I give two examples below.

'This training has shown me how to make use of various valuable resources of which I was previously unaware' (Unidentified student).

'I came to this session a little nervous as my skills were so poor. I have learnt so much & I have no doubt that my research will benefit' (Unidentified student).

Within the sessions, students often help one another since the self-identified gaps revealed by the Skills Audit enable them to recognise and acknowledge their areas of need. The realisation that they are not alone in their unawareness of resources available increases students willingness to engage with the session and with each other, since they do not feel embarrassed about admitting there are areas in which they need help. The realisation of shared need enhances student receptivity since it enables the students to relax instead of becoming defensive about their lack of knowledge. This statement is based on my own experience of delivering sessions rather than on published research.

Conclusion

This history of embedded information literacy for research students at UW serves to place sessions provided by Library staff on an equal footing with any other sessions within the programme thus eliminating the first barrier to student receptivity, that is, the perception of information literacy sessions as a non-essential add-on.

In order to provide sessions that will be well received by research students, Library staff need, as Miller notes, to 'focus on fostering and improving services and sources based on identified motivators and demotivators' (Miller, 2008 p.266). As noted above, Miller's work poses a number of questions in the area of 'research literacy' (Miller, 2008 p.266). Although these questions are not answered in Miller's article, some of them can be addressed with reference to the extensive and invaluable research conducted by the Research Information Network (Network, 2009, Network and CURL, 2007). Such an investigation could provide the content for a separate article.

The consensus within the literature cited is that the deeper Information Literacy is embedded into the wider research training programme; and the more it is perceived as integral to the cycle of 'gathering, organizing, reflecting and synthesising' (Green and Macauley, 2007 p.327), the more receptive researchers will be to it since meaning which pushes the boundaries of knowledge is the goal of research.

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Google Scholar	Leader	<p>Google Scholar. (See options under 'more') also http://scholar.google.co.uk</p> <p>Pulls together academic resources, mainly journals and books. Some full text, mostly just abstract Use as index Check A-Z List to check if UW hold journal. e.g. Reflective practice nursing – cited by – leads to more references NB can set up Refworks export preference in Google Scholar e.g. <i>children's literature</i> <i>Narrative therapy</i> <i>Minus education</i> Students own searches</p>	5 mins
			5 – 10 mins
Intute –JD to demo	Leader / Students	<p>Point students to Intute site http://www.intute.ac.uk</p> <p>Quality websites [Search "postgraduate study skills" if needed] Students browse own subject areas [Now no longer added to but still useful]</p>	7 – 10 mins
RSS feeds	Leader/ Students	<p>Google Reader – see first handout for instructions</p> <p>Demo RJ – Google reader Google and sign in – follow handout Can also be accessed via PILOT</p>	15 mins
Open Access Publishing and WRaP JD to demo. SB -	Leader / Students	<p>For general information about Open Access Publishing see PILOT</p> <p>Introduce Janet. Demo WRaP and explain purpose. Students to browse resources currently available. SB to show what can be done.</p>	10 – 15 mins
British Library	Leader/ Students	<p>Inform students of services available from BL. Show website.</p> <ul style="list-style-type: none"> • Use for ILLs • Provides Zetoc service – for instructions on setting up Zetoc alerts see first handout • Useful information on supporting researchers www.bl.uk • Catalogue – largest physical collection in UK • Visits – see website • Joining – see website • Training days – see website and Grad School blog • Digital resources – e.g. 19th c newspapers <p>Introduce Su. And finally ... EThOS – give out handouts and demo site</p>	10 mins
SF to explain			
Skills Audit and Evaluation sheet	Students	<p>Students to complete the last question of the Skills Audit sheet. Students to complete evaluation sheet and submit both sheets to lecturer.</p>	10 mins
Assessment: No assessment			
How will you know the learning outcomes have been reached by the students?			
Evaluation sheets given out and completed at end of session. Evaluation also included in feedback on the whole module.			
Additional notes: Handouts: Finding and Managing Information via the Web. Efficient Internet Searching.			

Appendix B. INFORMATION LITERACY CHECKLIST

LIBRARY RESOURCES

1. Can you list a number of different sources in which you might expect to find information to use in your research? YES/NO

2. Have you made use of:
 - e-journals? YES/NO
 - databases (e.g. bibliographic indexes)? YES/NO
 - electronic reference sources? YES/NO

LOCATING AND ACCESSING RESOURCES

3. Do you know how to conduct a systematic literature search? YES/NO

4. How would you trace details of books published in your subject area?
 - a) at University of Worcester
.....
 - b) held elsewhere
.....

5. Do you know how to trace relevant journal literature and conference papers? YES/NO

6. Which of the following have you done when searching electronic resources?
 - Applied search logic (AND, OR, NOT) YES/NO
 - Used truncation (e.g. *) YES/NO
 - Searched for phrases YES/NO

7. Have you identified databases relevant to your subject accessible via the library web pages? YES/NO

8. Are you aware of the reciprocal borrowing schemes available to you? YES/NO

9. Are you aware of the resources available via Repositories and Open access publishing? YES/NO

CURRENT AWARENESS

10. Do you use blogs, discussion lists, and/or social networking sites to develop subject awareness? YES/NO

11. Do you use any current awareness alerting services / RSS feeds? YES/NO

INTERNET AND DATABASES

12. Could you list the comparative advantages and disadvantages of search engines and subject specific web resources? YES/NO

EVALUATING INFORMATION

13. Do you feel confident to evaluate the quality of the information you find? YES/NO

14. List 3 reasons why the quality of a web site may vary from that of a printed resource

.....
.....
.....

15. Would you routinely make use of the peer-review tick box in an electronic full text service? Why or why not?

.....

ORGANISING AND COMMUNICATING INFORMATION

16. Are you familiar with the referencing scheme preferred by your discipline, including how to reference electronic material? YES/NO

17. Are you aware of copyright regulations in relation to use of published material and the publication of your own material? YES/NO

18. Do you know how to use bibliographic software to organise your references? YES/NO

AND FINALLY.....

19. Have you identified any areas where you would like to improve your skills?

.....
.....
.....