Supervisors' Guide to Learning Needs Analysis (LNA) and Personal Development Portfolios (PDPs) and their Implementation

This guide should be seen as a practical appendix to the document: *PhD Supervisors' Guide 2004* which explains the background to the changes and developments taking place in relation to the support and training of doctoral students. Although these initiatives are styled in a way that allows us to demonstrate an appropriate response to external pressures and directives (the Joint Funding Councils and the QAA Code of Practice for Postgraduate Research Programmes), they are, in the main, simply a formalisation of the good practice normally carried out by supervisors and research programme leaders. These two particular elements (LNA and PDPs) have the advantage of helping us to structure and advance the development of research students by identifying their real training/learning needs and by providing feedback to Schools/Departments and the Graduate Schools on the kinds of courses/workshops required.

Learning Needs Analysis (LNA)

What is Learning Needs Analysis?
The term 'Learning Needs Analysis' used in the University of Reading documents recognises that learning has cognitive and affective/emotional components as well as the 'performance' dimension connoted by the word 'training' found in external documents (Training Needs Analysis). The basic principles of LNA are encompassed in the following:

the need to compare each student's knowledge, ability and approach in relation to research against a standard of achievement required on the completion of their registration. The difference between current standard and required standard represents the learning need.

One particular benefit of this procedure is that a student who can demonstrate that they meet the minimum required standard need not attend courses unnecessarily, although there is a suggestion in the QAA Code of Practice (2004) that opportunities should be provided for students to develop existing 'skills' beyond minimum to higher level standards.

How can it be implemented?
Supervisors can initiate the process of Learning Needs Analysis in the following ways:

- Before the first meeting with the student, they should review the information provided during the application process to identify likely areas of competence and those which will clearly need further

development. (Such information can be gleaned from the original proposal {if produced by the student}, references, the CV and admission interview.)

- At the beginning of the first year a review of learning needs should be undertaken with the student to identify immediate learning needs and longer term ones in relation to their proposed research. At this stage the supervisor acts as a guide to initiate the beginning of the Personal Development Profile (PDP) and to provide advice on available learning opportunities.

- Thereafter, the student should be encouraged to become increasingly an autonomous learner, pursuing learning opportunities, though seeking the supervisor's advice when necessary. The supervisor's main role then becomes one of monitoring the PDP and providing evaluative comment on it for the annual review of progress. During the course of each year it is possible that other learning needs will become obvious to either the student or the supervisor or both so there is certainly room for joint discussion of how these might be incorporated into the PDP.

An example might help here. A prospective student's cv might indicate that they have undertaken study in an area most relevant to the research proposed. Further, they may have referenced a few examples of relevant current work in the field in the research proposal. However, an interview might have revealed that this derived from the course material they studied previously and that the student had no experience of searching databases for relevant literature. Comparing this with competences listed in the QAA Code of Practice (see PhD Supervisors' Guide 2004), in particular A3 (i.e. a knowledge of recent advances within one's field and in related areas) and C 2 (i.e. design and execute systems for the acquisition and collation of information through the effective use of appropriate resources and equipment), demonstrates two learning needs, one related to knowledge and one related to means to acquire that knowledge.

In this case, the student can be advised of texts to read in the cognate area, and about sessions in the School Research Methods Programme, workshops run by the Library and the resources in the S@il Centre. They might, perhaps, be given an assignment to survey recent developments in a particular sub-set of the field as a way of demonstrating their learning from all of these resources. This could be the eventual basis of a section in the Literature Review chapter of their thesis.

Personal Development Portfolios (PDPs)

What is a Personal Development Portfolio?

This is a record maintained by the student of research and transferable skills identified, in collaboration with the supervisor, as areas of learning need, how those learning needs were addressed and the outcome of those activities. This outcome should contain evidence that the learning needs have been met. This evidence can take a range of forms such as satisfactorily completed assignments or thesis chapters, feedback from peers / experts / research participants after a seminar / team activity / research encounter, etc.

The University has provided (2004/05) each student in the Graduate Schools for the Social Sciences and Arts and Humanities with a PDP Log Book which also contains information on how it can be used. (Science students can also obtain a copy and should be encouraged to do so. The process is voluntary for them this year but is likely to be formally required next year.) For example, it provides information on the Skills Self Audit Process and pages listing, for each formal stage in the course of registration, the skills required to become an effective researcher. There is space for the addition of learning needs relevant to the particular discipline area. Each item on the list has space allocated for the student to audit those skills, plan for their development and record it. The PDP is presented in ring-bound form so that additional materials can be added, e.g. evidence material.

Workshops for students on the Self Audit Process and the compilation of a PDP are provided by the Graduate Schools.

What support can supervisors provide to students in relation to the PDP?

At the commencement of study each supervisor and individual student should engage in a process of Learning Needs Analysis to identify the skills, knowledge and attitudes to research that could benefit from development to meet the minimum standards required by the QAA Code of Practice for Postgraduates. These should be prioritised in relation to the stages of research and resources available for their development (see below) so that a time plan can be devised.

Subsequently, at each formal stage in the course of research (before progress reports are made, prior to the Upgrade/Transfer process and prior to submission), the student and supervisor/s should re-audit the development plan and evidence of progress to consider any gaps revealed, plus any developments/amendments required to the plan, and to confirm that progress has been made. NB The annual report of 'satisfactory progress' should take account of work on the PDP as well as on the research project per se.

The supervisor should identify any gaps that the student may not be aware of as a novice researcher, provide guidance on the practicality of the plan for development and provide suggestions about learning resources available in the School, the University and externally.

Potential Learning Resources:
School Research Methods Programmes (Contact your Faculty Programme convenor).
Graduate Schools Events and workshops (http://www.reading.ac.uk/socscigrad).
The University Web-based 'Essentials of Research Methods' Programme
University provision through CSTD (http://www.reading.ac.uk/cstd), the Careers Service and the Library.
UKGRAD programmes (http://www.grad.ac.uk).
Research Council special events (http://www.rcuk.ac.uk)

Information Sources
The Metcalfe Report (http://www.hefce.ac.uk/pubs/hefce/2003/03_23.htm).
The Roberts' Report (http://www.hm-treasury.gov.uk/Documents)
Enterprise_and_Productivity/Research_and_Enterprise/ent_res_roberts.cfm)
The University Code of Practice on Research Students,
(http://www.reading.ac.uk/web/files/qualitysupport/copresstudents.pdf).