Postgraduate education for advanced practitioners — a novel approach to course design

Stephen Tomlin, Ian Costello, Andrzej Kostrzewski and Soraya Dhillon describe a new approach to developing learning to support advanced practitioner development which builds on the positive experiences of how adults learn, education theory, clinical practice and peer review.

In the past decade there has been a clear drive towards competency-based practice and the NHS Agenda for Change and the new knowledge and skills framework (KSF) now clearly require health care professionals to be autonomous practitioners committed to developing their knowledge, skills and competencies in order to progress their careers. The new competency-based framework for pharmacists has clearly mapped out the career pathway from pharmacists from basic, advanced, specialist and consultant pharmacists.

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We report a new approach to developing a programme of learning to support advanced practitioner development which builds on the positive experiences of how adults learn, education theory, clinical practice and peer review. The approach was developed as a partnership between an experienced postgraduate programme team (SD/ AK) from academia and primary care pharmacist/academic clinical manager at Guy’s & St Thomas’ NHS Foundation Trust, London.

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Pharmacy postgraduate education and training has developed a robust platform over the past 20 years. Following registration pharmacists can embark on further postgraduate certificate, diploma, master or doctoral level programmes. The profession of pharmacy works within the framework of the Royal Pharmaceutical Society’s code of ethics and strongly recognises its clinical governance responsibility. Pharmacists undertake continuing professional development (CPD), often supported by the Centre for Pharmacy Postgraduate Education (CPPE), and are required to keep a CPD portfolio.

Development of specialisms during the 1980s and 1990s relied on enthusiastic, dedicated pharmacists to work on their own and develop themselves through established CPD and reflective practice. Some supported their learning through attendance at specialist courses and reading for specialist university degrees.

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Course design

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<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Stage 1</td>
<td>Review of adult learning theories and Knowledge Skills and competencies for the paediatric pharmacist</td>
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<tr>
<td>Stage 2</td>
<td>Analysis of prior learning including prior experiential learning and courses undertaken. This enabled the admissions criteria to be agreed</td>
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<td>Stage 3</td>
<td>Syllabus and competencies for the module were designed</td>
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<td>Stage 4</td>
<td>Discussion on the teaching formats to be incorporated in the course</td>
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<td>Stage 5</td>
<td>Designing the module template</td>
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<tr>
<td>Stage 6</td>
<td>Design of a support and resources framework using a managed learning environment</td>
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<tr>
<td>Stage 7</td>
<td>Expert teacher support; appointment of expert paediatric mentors; identifying experts in the field of learning to assist in seminars</td>
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<tr>
<td>Stage 8</td>
<td>Design of the assessment framework</td>
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arena where there are often no definitively right or wrong answers. In order to make decisions from a greater understanding of the problem, professionals need to think back on their practice, and at the time of practice. The ability to reflect on what you do is becoming increasingly recognised within all health professions.

The manner in which a learner tackles a learning task has been termed the approach to learning. Research in this area has recognised two main descriptions of approaches to learning as “surface” or “deep”. Using the surface approach the learner generally memorises material in a routine manner without a lot of reflective thinking. This leads to an inability to reiterate what has been learnt in a format other than how it was originally learnt. The deep approach is characterised by the learner seeking meaning and relating previous experience, leading to an improved quality of learning.

The cultivation of reflective thinking, using participants’ preferred learning style, has been developed during the course through the use of many different learning and teaching strategies. This approach was deliberately designed to allow students to adopt a deep approach to their learning.

Teaching methods

The programme was delivered through a problem-based learning (PBL) approach. Traditionally the method of PBL evolved from as early as 1910 and was popularised by Barrows in the 1960s at McMaster University from as early as 1910 and was popularised by the problem-based learning (PBL) approach. Teaching methods

<table>
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<td>Working groups</td>
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<tr>
<td>Identifying the problem areas for learning</td>
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<tr>
<td>Identifying and researching the literature</td>
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<tr>
<td>Developing the answers and literature to support the answers</td>
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The learning was then supported by expert seminars. Support from a managed learning environment was also available to students.

The purpose of this platform was to facilitate discussion between students and tutors, enable a sharing of learning resources and study materials. The underlying philosophy of the programme built on the following principles (Benjamin Franklin [1706–90]):

- Tell me and I will forget
- Show me and I will remember
- Involve me and I will learn

Why this new approach? The course has been developed on the premise that with the rapid expansion of postgraduate courses in pharmacy practice it raises the issues of availability of staff time for teaching by experienced practitioners and release of students by the workplace. There is also the need to embed learning in the workplace through reflective practice and peer review.

It is unfortunate that, although a clear pathway of development of pharmacists in practice is deemed to be necessary, it has not been endorsed in the formal sense — unlike medical education, where the medical graduate enters a two-year foundation programme before choosing a career path for specialist training. Some have argued for a deanery-style model for pharmacy education and this will facilitate a much better, more focused and structured pathway for pharmacy development. This approach could be further developed to work within a multiprofessional deanery supported by pharmacy teacher practitioners.

The fundamental principles underpinning this design for the course was first, use of work-related learning and, secondly, the ability of pharmacists to take the programme from a wide geographical base. The role of academia in this style of learning development is to facilitate the programme development, assure the quality of the educational programme, accredit the course tutors and provide a valid and robust assessment framework.

This programme was a pilot to identify a methodology which could support pharmacist developments in line with the knowledge and skills framework of Agenda for Change. The approval of specialist pharmacy tutors can now be recognised as part of the practice domain for the advanced and consultant practitioner.

The flexibility of this approach will enable maximisation of resources from the manager and tutor perspective, and will assist in peer review of specialists. It could also help in building a structure to support the development of faculties.

Advanced course in paediatrics

The programme of the advanced course in paediatrics was devised as a 60-hour module of learning and was organised in academic year 2003–04. Six specialist paediatric pharmacists were enrolled on the course. They had three to six years’ experience as paediatric specialists and worked across both teaching and district general hospitals.

Study days

Students attended three study days away from the workplace. The three days away from the workplace comprised three sessions which were run at the university:

- **Session 1**: Students work in a PBL group. Individual and group learning needs are identified on the first study day. The group agrees the areas for development and assigns specific topics for development. The course covers both clinical aspects as well as practice developments.
- **Session 2**: The session then explores developments in the field of practice and areas for advanced learning. Home work and action plans are developed for the group and for individuals.
- **Session 3**: Students develop their learning for the themes identified in session 1 and teach and debate the aspects they each were assigned to explore. Each student was involved in researching an area of practice and prepared a teaching session. This develops the learner as a teacher and encourages peer review, and the presence of an expert tutor allows for exploration and debate of the issues the student is presenting.

The topics for the second student-led session are examined and each student selects a topic on the basis of their individual learning plan. Review of the learning log book and reflective practice diary is organised as a seminar and each student’s practice is reviewed by self, the peer group and the specialist practitioner.

Session 3

Students led seminars with peer review and expert tutors are developed further. Students undertake literature retrieval, evaluation and critical appraisal and devise a teaching session establishing the learning outcomes. Students interact with other students through the managed learning environment and support each other in establishing learning objectives for individual students and
for the group. A teaching session and seminar on expert practice is developed. Additional coursework for the student includes a presentation in a poster format which other academics and specialists are invited to attend.

The organisation of these teaching sessions enables the student to develop a range of generic skills such as:

- Self directed learning skills
- Research
- Literature evaluation and critical appraisal
- Teaching
- Communication and confidence
- Time management
- Peer review and giving feedback
- Expert practice

Between the sessions the appointed expert tutors visit the students in their workplace and the other students are invited to attend this visit. The student then conducts a ward round with the expert tutor and fellow students. The tutors review the student’s clinical log book.

Assessment: All students were required to complete each element of assessment which comprised:

- Review of the clinical log book
- Viva with expert tutor and academic member of staff
- Assessment of student led sessions
- Clinical topic
- Practice development

Course evaluation: Evaluation of the course was undertaken when it ended using a structured feedback questionnaire which the students, tutors and course organisers completed. The feedback on the programme identified positive and negative feedback (see Panel).

Discussion
In practice this new approach to course delivery has been welcomed by both students and tutors. The underpinning philosophy of the programme has been built on an understanding of how pharmacists approach their learning and the factors that influence learning outcomes and it has enabled development of the individual as an autonomous learner.

The resources required to deliver this approach have been maximised. Geographical learning sets, the use of a managed learning environment and ensuring a good mix of students from teaching and non-teaching NHS trusts encourages peer review and excellent coverage of the curriculum. This approach can now be further developed using a blended learning approach. A blended learning approach enables learning to be supported by a managed learning platform, which can facilitate tutor dialogue and discussion while the student is in the workplace, and supplemented by face-to-face seminars or study days or both.

**Feedback**

**Student feedback (n= 6)**

Positive learning experience
- I felt in control of my learning
- Excellent peer level support
- Tailored the learning to my needs
- The first time my practice was reviewed by an expert and I learnt from other specialists

Areas for course development
- A scary way to learn, expected more lecturers and tutor input
- Support from the MLE was variable due to technical difficulties
- Feedback on written work was slow
- More peer review by the expert tutor would be helpful

**Course organiser feedback (n= 1)**

Positive experience
- Enhanced adult approaches to learning
- Enhanced responsibility of the students
- Encouraged a deep approach to the learning
- Reduced the total number of experts required to deliver a specialist module
- Excellent partnership working between academia and practice
- Specialist tutors also learnt from each other and the different specialist environments

Areas for course development
- Training for Tutors
- Training on the use of the MLE
- Time needs to be made available for the tutors in their current role for marking assessment and feedback
- Depending on the specialist area of practice, more specialist tutors need to be identified

**Expert tutor feedback (n= 2)**

Positive experience
- Fascinating to see the variances in clinical practitioners at similar stages of their careers
- Excellent use of different assessment tools, without which full judgement would not have been a true reflection
- Development of higher intellectual skills of evaluation and critical thinking for me in my tutor role

Areas for course development
- Increased utilisation of the accompanied ward visits
- Increased time needed for the viva and some discussion groups
- Role as a tutor needs to be aligned to current role in trust

This approach to course design is an ideal delivery method for education and training for advanced practitioners and consultant pharmacists. Further step for postgraduate pharmacy education is to engage with other health professionals to advance interprofessional learning.

This new framework for modernising medical careers is an opportunity for pharmacy educators to engage with medical colleagues.

This new initiative confining learning and assessment both in terms of practice and the-