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Nurse Education Tomorrow 2008

Core Paper for Policy Drivers theme

**The Impact on Practice (ImP) Project:
A project to develop a framework to evaluate the impact of
continuing professional education on practice**

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Background and context

There has been significant investment in healthcare education globally (Jordan, 2000). In the UK alone, Skills for Health (the UK Sector Skills Council for Health) estimate an annual expenditure of £1.5 billion on 2,000 healthcare education programmes undertaken by 75,000 students within 80 higher education institutions and partner healthcare providers and 40,000 placement settings. This expenditure is the investment to prepare a competent and flexible workforce that can deliver effective and safe person-centred care to meet current and future healthcare delivery needs (The Mackinnon Partnership, 2007; Vize, 2007) and, once qualified, to maintain and enhance professional knowledge and skills.

Government departments have issued a number of statements advocating the benefits of lifelong learning. For example, the Department of Health in England asserted that 'Every aspect of healthcare delivery and strategies for health depends on the education and skills of individual staff. *Investment in their learning and personal development is, in a real sense, spending on patients and is essential to the future quality of the health service'* (DoH, 2002, p.7, our emphasis).

Statements such as this one stand in stark contrast to an outcomes-driven health service and needs-led education, making it imperative for healthcare educators to articulate the impact of continuing professional education (CPE)

on patient care, and its added value to employers, education commissioners, as well as to students. In other words, evidence of the 'health return' in terms of improved patient outcomes on the investment in CPE is needed (Sayer and Gray, 2006). There is, however, a surprising lack of empirical evidence of the effectiveness of CPE (Royal College of Nursing, 2002; Clark, 2005; Attree, 2006; Griscti and Jacono, 2006), partly because formal evaluation is viewed as being too time-consuming (Chartered Institute of Personnel and Development, 2007). So we currently have the rhetoric about the benefits of CPE and the reality of relatively little evidence to support such claims.

For the purpose of this paper, CPE is defined as any taught course that includes an assessment of learning and the subsequent application of this learning to a practice situation.

Although the importance and complexity of evaluating the effectiveness of professional education programmes has been widely discussed (Eraut, 1985, 1994) remarkably little progress has been made over the past 20 or more years – possibly because of the challenges involved. But are these difficulties sufficient to 'excuse complacency' (the term used by Hutchinson, 1999)? Hutchinson goes on to argue that there is a 'fundamental difficulty in addressing the questions that everyone wants answered: what works in what context, with which groups and at what cost? Unfortunately, there may not be simple answers to these questions' (Hutchinson, 1999, p.1267).

A small number of studies have attempted to evaluate specific programmes (see, for example, Hardwick and Jordan, 2002; Hardacre and Kemp, 2003; Sharples *et al.*, 2003; Carpenter *et al.*, 2004). However, these studies have all tended to be short-term, small-scale, highly specific and focussing on learner satisfaction (participants' immediate reactions) and/or the teaching strategies employed (the learning process), rather than on any direct impact on practice (changes in behaviour and, more importantly, the results of these changed behaviours).

Further limitations include:

- an over-reliance on self-perception reporting predominantly by students as the key stakeholders rather than the use of objective criteria and a range of stakeholders, including employers and service users
- an emphasis on the evaluation of individual programmes and typically confined to a single locality
- predominant use of retrospective methods: such data are subject to errors in recall and bias
- benefits to patients are either assumed or implied rather than explicitly assessed and linked to CPE.

In terms of Kirkpatrick's work on the levels of training evaluation developed over 30 years ago (Kirkpatrick, 1975; 1996), a focus on learner satisfaction and teaching strategies corresponds to Levels 1 and 2 only (see Table 1), while Levels 3 and 4 have been largely neglected. This has resulted in a partial and fairly limited picture of the impact of CPE on professional practice and a lack of validated approaches and methods.

Table 1: Four levels of training evaluation (Kirkpatrick and Kirkpatrick, 2005)

Level 1: Reaction	How do learners react to the programme?
Level 2: Learning	To what extent has learning occurred?
Level 3: Behaviour	To what extent has on-the-job behaviour changed as a result of the programme?
Level 4: Results	What is the result of any changed behaviour resulting from the learning?

Guskey (2000) is also critical of evaluative practice using participant 'happy sheets' which does not go deeply enough, and which is usually too brief. Just as continuing professional development (CPD) should be an ongoing process, so should its evaluation, he argues. In teacher education, Guskey (2000) proposes that evaluation of impact should take place at five different levels: (i) participant reaction, (ii) participant learning, (iii) organisational support and change, (iv) participants' use of new knowledge and skills, and (v) pupil learning outcomes. In a two-year evaluation of the impact of CPD in schools, using Guskey's evaluation framework, Goodall *et al*. (2005) concluded that activity generally addressed the first three levels only and should be extended

to include the impact on student outcomes and linked explicitly to school development plans. Clearly, the need for effective impact evaluation is not restricted to nurse/healthcare education, but appears to apply to other areas of professional education.

A recent literature review commissioned by Skills for Health (The Mackinnon Partnership, 2007) also concluded that the most compelling and focussed evidence of the effectiveness of education was to be found in tightly defined fields. For example, a formal evaluation by Zack and colleagues (2002) of a training programme designed to reduce ventilator-associated pneumonia in patients requiring mechanical ventilation. Moreover, they were only able to find six such studies in their broad-based search of the international healthcare literature.

In a 'value for money' culture and a political climate that demands evaluation of performance and evidence of effectiveness, this continuing lack of evidence may deter future investors (Hardwick and Jordan, 2002). Alternatively, it may result in a diversion of funding from CPE whenever healthcare budgets are squeezed (*Health Service Journal* News item, 31 May 2007).

Prior to the project we had a number of preliminary in-depth conversations about the benefits of CPE with three groups of stakeholders – employers, patients and post-registration nursing students. A number of key themes emerged which informed our thinking about the project:

- Employers acknowledged the importance and timeliness of the issue and stressed the importance of any approach that was developed being manageable (i.e. easy to understand and use) in a busy working environment. It also had to be dynamic so that it would remain relevant and responsive to rapidly changing healthcare environments and should not be programme specific, but rather be able to capture the essence of the things that actually make a difference to patient care. Neither should it require formal research activity.
- Patients articulated one key message – they wanted reassurance that healthcare professionals have the necessary knowledge and skills to provide good care.

- Students recognised the value of helping them to articulate the longer-term benefits of their learning following registration. In addition, the students seemed quite keen to be able to demonstrate direct benefits of their learning for patient outcomes and thought that their managers would also want this.

The Impact on Practice (ImP) project

In response to the limited evidence and alongside anecdotal evidence of the impact of learning beyond registration on practice, the aim of the ImP project was to develop a framework to enhance the impact of CPE on practice that:

- is underpinned by relevant theoretical insights from the adult education and healthcare literature
- is robust and user friendly
- involves a range of key stakeholders in its development and validation
- is cost effective and manageable to use in a pressurised working environment
- is dynamic so that is remains relevant in a rapidly changing healthcare environment
- is sufficiently flexible to be applicable ultimately to a range of different modes of delivery and contexts in health and social care.

The project was funded by the Higher Education Funding Council for England (HEFCE) as part of its higher education innovation funding stream.

The first phase of the project involved a structured literature review of the healthcare, teacher education and organisational development literature, contributions from an external Advisory Group, student views about the benefits of their formal learning beyond registration, a series of in-depth conversations with strategic informants and two interactive conference presentations (Draper and Clark, 2006; Draper, Clark and Attree, 2007). It was concluded that the framework should focus on the process of CPE from the initial selection of students and course (the predisposing factors), through to delivery, support and assessment issues that enhance and sustain the impact of learning on practice (the enabling and reinforcing factors). In an early Australian study of in-service teacher education, Ingvarson and MacKenzie (1988) found that it was the amount of organisational support and

assistance that influenced whether or not course objectives had been implemented. 'Returns from investment in in-service education by school systems will be limited ... if the planning for policy implementation goes no further than the provision of in-service courses alone, without the orchestration of follow-up support from within the school and from external sources' (p.139). Similarly, Goodall *et al*. (2005) found that schools identified time for courses and also to implement changes as a result of learning as one of the key barriers to continuing professional development.

In the second phase, the project team used the detailed information gathered in Phase 1 to develop a draft framework. Individual interviews were then undertaken with a range of key stakeholders. These included those involved in commissioning education, service managers, healthcare educators, students and service user representatives, to elicit their views concerning the core elements and issues that comprise the draft framework and the feasibility of its use in a pressurised healthcare environment. These interviews informed a revision of the framework.

The organising framework is divided into four segments:

• the organisation
• the education provider
• the student and
• the student's manager.

Within each of these segments a number of key issues has been identified as determinants of the likelihood that the CPE will have an impact on practice. Each cluster of issues in each segment is further sub-divided in relation to time scale: pre-selection, before the course, during the course and after the course. This time dimension reflects the work of Guskey (2000) and also of Ellis on the key issues that appear to influence the outcomes of CPE (Ellis and Nolan, 2005). Ellis identified four phases reflecting students' experiences of CPE over time: 'going in', 'coming out', 'reaping the benefits' and 'carrying it on'.

The latest version of the framework will be presented to delegates and will provide a focus for discussion in order to benefit from the experience and insights of a group of international healthcare educators.

Next steps

It is proposed to extend this project to pilot the framework and possibly also to develop criteria that can be used by organisations to self-assess their capability in relation to the finalised key determinants of success. This will involve further refinement of the framework using an expert panel. Once agreement has been reached on all the various elements and details of the framework, including any criteria to be developed, it is envisaged that action research and/or case study research will be used in a range of locations and with a variety of CPE programmes to test its utility in practice over a two- or three-year period.

Some reflections

Over the course of this paper a number of significant challenges have been identified. Initially, we envisaged being able to develop a tool in partnership with key stakeholders that could be used by healthcare educators and providers to investigate the direct impacts of CPE on practice. However, there are no standardised 'off-the-shelf' evaluation designs or approaches that will provide valid, reliable and sensitive measures of either the process or outcomes of healthcare education. Acknowledging the complexity of the messy real world of healthcare practice (Ellis and Nolan, 2005) where resources are scarce and confounding variables are difficult to control, no amount of experimental or quasi-experimental research is ever going to be able to expose a clear-cut causal relationship between CPE and practice/patient outcomes. In the words of Greenhalgh and colleagues (2003, p.145): 'The linear and formulaic link between evidence and practice implicit in evidence-based medicine (has proven) inadequate for the complexities of educational research'.

The project team is, however, hopeful that a number of key determining factors can be identified. Focusing on organisational culture and the practice context, the role and involvement of the student's manager in CPE, the

selection, preparation and support of students, and the contributions that can be made by education providers may indeed help to maximise the return on investment in CPE in terms of better patient care.

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