

# Evaluation Methodology

## Introduction

Programme evaluation forms an integral part of the delivery of our education programmes. Gathering evaluation data is the responsibility of the programme leader(s). The relevant educational steering group receives the evaluation outcomes and recommends improvements. This cyclical process provides a quality assurance and ensures that the education programmes are continually evolving.

Thorough assessment of the education process is required for quality assurance processes to:

- ensure alignment to the Learning and Teaching Strategies of HEIs;
- fulfil rigorous investigation by external examiners and the quality assurance processes;
- demonstrate and inform on the quality of staff development and progression;
- monitor student progression;
- provide evidence for evolving and improving the programme.

And for the Leicester Model to:

- provide feedback to stakeholders, including service organisations and patients, whose unique contributions underpin the learning cycle.

## Ethics and Governance

Ethical principles guide the collection of all evaluation data. Evaluation studies follow the governance processes on collecting information from students, tutors, stakeholders and across partner HEI academics.

Evaluation study approval is sought from the university ethics committee. In addition, collecting information from patients and health and social care staff requires the approval of NHS ethics committees.

Ethical approval is first sought from the Central Office of Research Ethics Committees (COREC). All evaluation involving clinical settings is submitted for ethical approval through relevant NHS local research ethics committee (LREC).

For larger, multi-site evaluations, approval should be sought from the Multi-site Research Ethics Committee (MREC).

The research ethics committee for social services is the Research Group of the Association of Directors of Social Services (ADSS)<sup>1</sup>.

## Action Research

Our evaluation studies are multi-method in their structure. They generally consist of a combination of semi-structured questionnaires, focus groups and assessment outcomes. However underpinning our methodology is the application of action research models.

Action research models have been applied to the evaluation of the Leicester Model, ‘to improve education by changing it and learning from those changes’<sup>2</sup>.

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<sup>1</sup> Freeth, D., Reeves, S., Koppel, I., Hammick, M. and Barr, H. (2005). *Evaluating interprofessional education: a self help guide*. The Higher Education Academy for Health Sciences and Practice, <http://www.health.heacademy.ac.uk/> (accessed August 2005).

Traditional action research methods were applied as a collaborative problem-solving approach, which would generate new knowledge and follow four stages: planning, acting, observing and reflecting<sup>3</sup>.

This method is ideal for these small-scale education interventions, taking place in real-life delivery and providing a close examination of the effects of such an intervention<sup>4</sup>.

Action research has been described as 'a self-reflective inquiry' by participants<sup>5</sup> and is the preferred methodology for group activities since those closest to the problems are in a best position to identify and work towards its solutions<sup>6</sup>.

In addition to contributing new knowledge, action research crucially aims to '*forge a link between intellectual knowledge/theory and action*'<sup>33</sup>.

## Stages in the Evaluation Process

The following stages contribute to the evaluation process:

1. defining the aim and objectives of the programme evaluation;
1. selecting and designing the methodology, including data collection instruments;
2. collection of data; and
3. analysis and dissemination of the findings.

### 1. **Defining the Aim and Objectives**

The purpose of the evaluation may focus on any aspect of the education programme from the preparation for teaching - 'presage factors'; the process of teaching - 'process factors'; to the product or impact of the teaching - 'product factors'<sup>7,8</sup>.

**Presage:** data has examined the impact of the programme planning on service delivery and includes examining the time required by front line health and social care staff to prepare for the programmes. Unpublished data is also currently being collected to examine the impact of pre-programme training on the delivery of the programmes.

**Process:** data from tutors and students on the content of the teaching and its relevance to their programmes is routinely collected<sup>9,10,11</sup>.

**Product:** data is routinely collected both pre and post programme on the professional attitudes and knowledge change of students. This is compared with their assessment outcomes<sup>12</sup>.

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<sup>2</sup> Kemmis, S. and McTaggart, R. (eds) (1992). *The Action Research Planner* (3<sup>rd</sup> Edition), Geelong, Victoria, Australia: Deakin University Press.

<sup>3</sup> Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*;2(4):34-46.

<sup>4</sup> Cohen, L. and Manion, L. (1994). *Research Methods in Education*, (4th Edition). London: Routledge

<sup>5</sup> Carr, W. and Kemmis, S. (1986). *Becoming Critical*, Lewes: Falmer.

<sup>6</sup> Heron, J. and Reason, P. (1997). 'A participatory inquiry paradigm', *Qualitative Inquiry*;3(3):274-294.

<sup>7</sup> Biggs, J. (1993). From theory to practice: a cognitive systems approach. *Higher Education Research and Development* (Australia);12(1):73-85.

<sup>8</sup> Freeth, D. and Reeves, S. (2004). Learning to work together using the presage, process and product (3P) model to highlight decisions and possibilities. *Journal of Interprofessional Care*;8:3-56.

<sup>9</sup> Anderson, E.S., Lennox, A. and Petersen S (2003). Learning from Lives: a model for health and social care education in the wider community context. *Medical Education*;37:1-10.

<sup>10</sup> Lennox, A. and Petersen, S. (1998). Development and evaluation of a community based multiagency course for medical students: descriptive survey; *BMJ*;316:596-599.

<sup>11</sup> Anderson, E.S. Lennox, A. and Petersen, S. (2004). New opportunities for nurses in medical education: facilitating valuable community learning experiences. *Nurse Education in Practice*; 4:135-142.

<sup>12</sup> Anderson, E.S. and Lennox, A. (2003). Leicester launches its first Interprofessional course for GP registrars, health visitors, district nurses and social workers. *CAIPE Bulletin*, Winter;8(22).

The Leicester Model of Education has examined all stages, although there is limited data on longer-term outcomes, for example the impact on learners' subsequent professional practice.

### **Selecting and Designing the Methodology**

Evaluation methodology is normally multi-method. Practical issues must however be considered in the design, e.g. availability of staff time, funding and research support.

The following methods have been used with students, health and social care staff, programme stakeholders and patients:

- semi-structured questionnaires using rating scales to assess pre and post attitudinal change, presage and process factors. Scored questions are balanced with opportunities to express qualitative comments;
- focus groups;
- postal questionnaires to patients and agencies;
- follow up questionnaire feedback of students just prior to qualification;
- analysis of student assessments;
- analysis of student recommendations to agencies for ideal patient management plans.

An extract from a questionnaire testing student knowledge and attitudes pre and repeated post programme.

*Please score (tick) the following relating to your experience prior to the course, where 1 indicates little knowledge or ability and 5 a great deal.*

My ability to describe the range and roles of professionals working to meet the health and social care needs of the community	1	2	3	4	5
My ability to analyse the central role of the patient in interprofessional working	1	2	3	4	5
My ability to analyse the importance of good team working relationships which draw effectively on the skills and roles of different professionals to meet patients' needs	1	2	3	4	5
My ability to assess the importance of effective communication within multi-disciplinary teams to ensure productive joint working	1	2	3	4	5

An extract from a questionnaire delivered prior to the programme and aimed at examining the students' perceptions of the teaching process.

*Please note: 5 is the highest positive response and 1 the lowest indicating a poor outcome. Some questions start with a positive response others a negative –take care when marking the form.*

4. I was not looking forward to studying alongside other undergraduate health care professionals	1	2	3	4	5	I was looking forward to studying alongside other undergraduate health care professionals
5. I felt prepared for studying with other students from different health care professions	5	4	3	2	1	I did not feel prepared for studying with other students from different health care professions
6. The small group tasks were not appropriate for inter-professional learning	1	2	3	4	5	The small group tasks were appropriate for inter-professional learning

### **Collection of Data**

Tutors are responsible for the administration and collection of questionnaires and for the identification and organisation of recruits for focus groups.

In our experience, valuable data can be lost with student attrition and when there is concurrent teaching in more than one geographic area. For this reason tutor training programmes emphasise the importance of adopting a disciplined approach to completing the programme data collection evaluation tools.

### ***Analysis and Dissemination***

Qualitative data is analysed for thematic responses using computer programmes such as NUDIST or more than one researcher.

Quantitative material is analysed using statistical packages e.g. SPSS for statistical significance and trends.

In many instances triangulation of data is possible where information on the process of a programme is collected from the patient, the student group and their tutor.

The outcomes of the evaluation are disseminated as follows:

- to the educational steering groups and as a contribution to the quality assurance processes of the HEI;
- to annual education reports. In some programmes these reports are provided to external, or independent evaluators, for example the Learning from Lives programme prepared reports for an NHS commissioned external evaluator. These external evaluation reports endorsed the quality of the learning experience<sup>13</sup>;
- as feedback to stakeholders and patients. Patients additionally receive thank you letters, which can provide an overall comment on the progress of the student cohort. Patients also receive feedback visits from student groups to reflect on their learning. Health and social care organisations also receive reports;
- outcomes form the basis of national and international conferences and papers for publication.

### **Conclusion**

Evaluation Studies contribute to the quality assurance process and ensures that the Leicester Model is continually evolving.

Evaluation outcomes identify that the Leicester Model of Education positively impacts on students' learning, professional attitudes and knowledge of team working and it prepares students for future practice<sup>14</sup>.

Learning in interprofessional groups enriches all programmes.

Patients enjoy taking part and feel supported.

Health and social care staff and their managers respect the ability of the model to inform on their practice and reflect on the quality of their collaborative working.

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<sup>13</sup>Wykurz, G. (2001). *Shaping Your Future Medical Workforce. Developing the NHS Role in Planning Undergraduate Medical Curricula. National Evaluation of Medical Curriculum Development projects.* NHS Executive Third year Report. October. School of Integrated Health, University of Westminster.

<sup>14</sup>Cole, A. (2002). *A multidisciplinary training programme on a deprived estate in Leicester is giving students an understanding of the type of social and health problems faced by residents- and opportunity to challenge service provision.* Health Development Today. April/May.