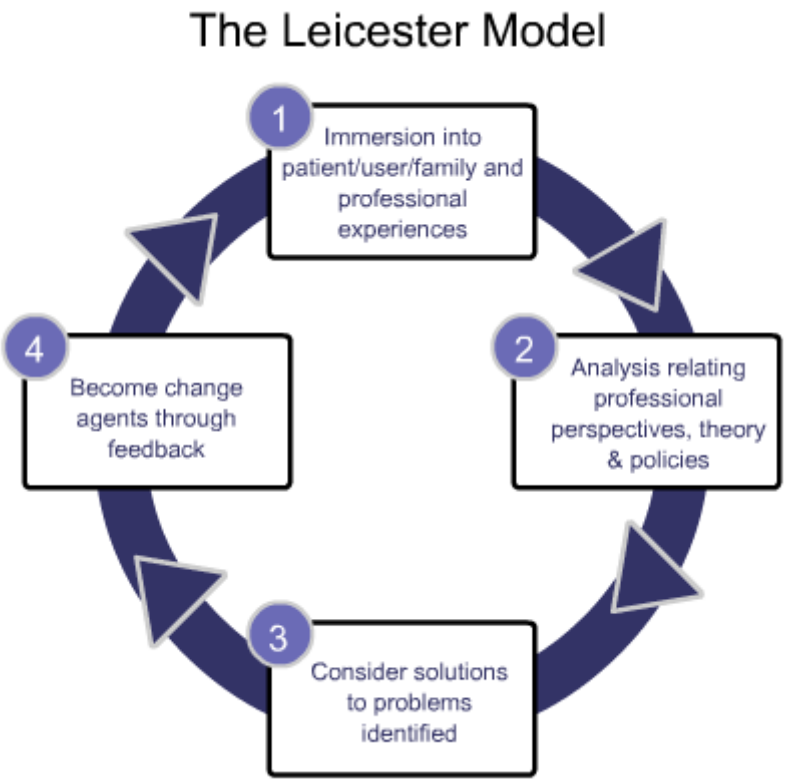
The Education Cycle

Students are grouped into cohorts of 24 – 32 students per teaching venue. Capacity of some clinical areas must be considered. They commence their learning with induction into the programme structure, team working and the geographic locality. In some situations students are prepared before going to the clinical area through use of VLE's, lecturers and preparatory reading.

They follow the Leicester Model of Education as illustrated in figure 2.

Step 1. The cohort is subdivided into interprofessional groups of approximately 3–5 students. Each group begins their programme by interviewing a patient in their home or a care setting to understand medical and social care issues impacting on their physical, psychological and social functioning. The patient's priorities and attitudes are explored, alongside their relationship with the services involved in their current care. In these dialogues with the patient/ user and family each student shared different holistic health needs assessments preferred by their chosen profession.

Figure 2. Outline of the Leicester Model.



The student group then interview the workers of 3 or 4 agencies/front-line practitioners providing care to their patient to explore the strengths and limitations of the service, and to compare service priorities with those of their patient.

Students additionally meet with representatives of the community in which their patient lives, to gain a wider understanding of the context of service provision e.g. the police or tenants' association or with managers from NHS Trusts.

Step 2. Facilitated by experienced clinical and academic tutors, the student group reflects on each interview. They relate service and theoretical perspectives with health and social care policies; they then interpret their findings and prioritise the issues identified. This process is supported by a range of experts which reflect the learning outcomes e.g. disability trainers, occupational psychologists.

Step 3. Following the interviews the student group analyse the interdependence of different statutory and voluntary providers and critique their team working. They then identify practical multi-agency solutions to improve the patient's quality of service delivery.

Step 4. The education cycle is completed with student solutions formally presented to the agency workers and their managers in an interactive presentation session. Students also provide written feedback to the individual service providers.

In clinical wards students combine care for these patients with working together to achieve the outcomes of the Model of learning.

Distinctive Features of the Leicester Model

- students are placed at the centre of service delivery, developing skills to provide multi-disciplinary care, learning directly from patients and their service providers;
- patients are partners in delivering and shaping the programme;
- the learning cycle has the potential to change and improve current practice;
- students gain insights into competing service priorities, communication issues, cultural and language barriers, and its impact on service delivery;
- students learn with colleagues across health and social care settings in interprofessional or uniprofessional groups and across community and hospital based care, with learning underpinned by theoretical perspectives;
- the education method is reflective, experiential and problem solving which encourages active learning and critical enquiry;
- formal presentations transform students into active partners in the development of multi-agency service delivery;
- service providers and managers can reflect on their case with their colleagues from the statutory and voluntary sectors and across the community-hospital interface;
- students learn from patient groups which are known to encounter inequitable access to healthcare, e.g. disabled people and the socio-economically disadvantaged;
- the model facilitates partnership working between Higher Education Institutions and organisations delivering care to the public. Academic tutors are immersed in an environment which both experiences and debates current clinical practice. Front line service providers are given opportunities to develop their educational skills as tutors.

Theoretical Education Perspectives

The Leicester Model seeks to enable students to be motivated to learn, to be inquisitive in their search for explanations and to apply their knowledge in a problem solving[1] manner to gain new understanding. The Leicester Model, including its interprofessional learning

[1] Knowles, M. (1984). *Andragogy in Action*, Gulf Publishing Co, Houston.

opportunities, is grounded in adult learning theory[2] and aims to promote deep thinking rather than learning by rote, and encourage students to apply knowledge to a range of situations and interpret their findings in the context of new situations. This goal is underpinned by constructivism theories[3] and its components of experiential learning[4] and reflection[5].

There is evidence that deep approaches to learning are more likely to be associated with higher quality learning outcomes[6]. These are achieved in the Leicester Model by:

- aligning programme outcomes with the overall curriculum content[7];
- the programme methodology of tutor facilitated, small-group activities, where students can learn from their experiences and formulate recommendations;
- assessments that support the aims and outcomes by constructive alignment[8];
- the rigorous, on-going programme of tutor preparation for the teaching method;
- partnership working between HEIs and health and social care organisations;
- the creation of non-threatening, protected learning environments.

Interprofessional Perspectives

The Leicester Model delivers quality interprofessional learning which achieves the standards set by the UK Centre for the Advancement of Interprofessional Education (CAIPE)[9], through the small interactive group learning that:

- enables students to personally experience, analyse and reflect on interprofessional working in their groups as well as observe others;
- is patient-centred from real-life experiences;
- allows students to explore professional roles and responsibilities in patient care;
- acknowledges that different professions work from different perspectives;
- allows similarities and differences between professionals to be respected;
- is appreciative of each others professional training and roles in the workplace;
- acknowledges terminology and language used by professions;
- ensures a greater understanding of why collaboration improves quality of patient care;
- engages students in the learning partnerships, making a full and positive contribution.

Learning Objectives

The Leicester Model flexibly delivers a range of educational objectives and learning outcomes, and at different academic levels, to develop:

- knowledge, skills and attitudes of team working within and across organisational boundaries;
- a practical understanding of interprofessional service delivery;
- clinical and interpersonal skills;
- an appreciation of the patient at the centre of service delivery;

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[2] Bruner, J.S. (1960). *The Process of Education*, Harvard University Press, Cambridge, Massachusetts.

[3] Piaget, J. (1950). *The Psychology of Intelligence*, Routledge and Kegan Paul, London.

[4] Kolb, D.A. (1984). *Experiential Learning*, Prentice-Hall, Englewood Cliffs, New Jersey.

[5] Shön, D. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass Publishers.

[6] Prosser, M. and Trigwell K. (1999). *Understanding Learning and Teaching: The experience in Higher Education*, Buckingham, SRHE/Open University Press.

[7] Biggs, J.B. (1987). *Student Approaches to Learning and Studying*, Australian Council for Education Research, Melbourne.

[8] Biggs, J.B. (1996). Enhancing teaching through constructive alignment, *Higher Education*;**32**:1-18.

[9] The UK Centre for the Advancement of Interprofessional Education (*www.caipe.org.uk*)

- an understanding of the specific needs of marginalised sectors of the population whose access to health and social care is problematic.
- An understanding of specific issues faced by in-patients in respect to their clinical problem and stage of the life cycle.

Learning outcomes can be applied across the learning continuum from pre to post registration and for professional and non-professional groups. The model allows flexible application of outcomes that are both challenging and reflecting the cognitive level of learning. Evaluation studies, both internal and external[10,11,] confirm that the learning outcomes are achieved.

Assessment

All programme assessments are aligned with the learning outcomes and the educational methodology. They are generally multi-method, with many programmes having a common assessment of a case study report. This report requires the student to critically analyse the information obtained from the range of interviews and visits in order to develop ideal solutions to improve the care provided to the individual patient and that of the healthcare systems in which the patient is placed. The use of multi-method approaches minimises the disadvantage that some professionals may experience when working within a multi-disciplinary group.

- all pre-registration interprofessional learning is recorded in a case study;
- for post-qualified students, assessments include a reflective component based on the learner's clinical experiences;
- master-level assessments include case studies, reflective portfolios and in some cases competency based problem-solving papers which test the application of the learner's knowledge to clinical practice.

Education Potential

Interprofessional working to achieve collaborative practice can be realised through this model of education. It can engage with a wide range of professional and non-qualified staff for example health and social care clinical and management staff, therapists, psychologists, pharmacists, healthcare support workers and a range of non-health organisations who work impacts on healthcare (e.g. housing officers).

There is a great potential for expanding this approach to learning. The model has already been replicated across urban and rural locations and in hospital and social care settings, using a range of clinical diseases and socio-economic environments.

Evaluation

All programmes undergo robust, quality audit cycles using a variety of methods, involving programme stakeholders and students.

[10] Lennox, A., Petersen S. (1998). Development and evaluation of a community based, multi-agency course for medical students: descriptive study. *British Medical Journal;316: 596-9.*

[11] NHS Executive Report on Third Year, G Wykurz. Shaping Your Future Medical Workforce: Developing the NHS Role in Planning Undergraduate Medical Curricula.