

# Concepts in adult education

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Educational needs of adults differ from those of children, as adults are generally more focussed and carry the knowledge of their background. Educational tools used for their education, must be modified to meet their needs and build on their background knowledge. Therefore, adult education must follow steps, including:

- Definition of needs assessment, determining the trainee's requirements and their background knowledge,
- Setting learning objectives,
- The use of instructional methods and creation of instructional material and finally,
- Assessment and evaluation.

Needs assessment identifies the cognitive gap (the gap between what the learners know and what they need to know)

Performing a Needs Assessment may include the following steps:

- Survey/Questionnaire of a group,
- Formal pre-test,
- Interview,
- To observe the group performing a task.

Setting learning objectives would mean setting:

- Goals (general end-points in the direction you wish to move),
- Objectives (which are very specific).

If, for instance, the goal were: "I want to learn how to do upper endoscopy", the objectives to achieve the goal's specific aims and instructional intent would be defined as to:

- learn about endoscopy,
- use instructional models, etc.

Why should objectives be set? Because they:

- Indicate to the student that they have a responsibility to learn,
- Allow students to check if the programme is being delivered,
- Create a framework for assessing the students and evaluating teaching programs.

Objectives should be:

- Comprehensive,
- Dynamic.

Essential criteria for the objectives should be that they communicate instructional intent, that they are specific and testable.

Instructional methods may include:

1. Lectures, which:

- are very efficient – they deliver a lot of material to many people in a short time
- can deliver the entire core curriculum
- However, in a lecture we don't know if the audience is listening and/or understanding.

Thus, one may use:

2. Problem-based learning, which incorporates the following steps and has the following advantages:

- The tutor poses a problem and students have to solve it,
- The tutor acts as a guide not the resource person,
- The students collect information and share it in a tutorial setting,
- It is time-consuming/labor intensive,
- It is enjoyable and effective for clinical teaching.

Instructional material may include: slides (which should always be clear) and handouts (which should be printed).

The management of the teaching environment should aim at keeping the audience's attention (with clear crisp messages and by avoiding minute detail). Questioning may help in keeping the audience's attention, but may also hinder it (depending on the question).

A teaching plan must include:

- An introduction (announces what one intends to cover),
- A dialogue (the body of the teaching episode),

- A closure (the take-home message).

The whole educational procedure must be followed by assessment and evaluation. Assessment may be summative (a final assessment) or formative (provides feedback to students).

Evaluation of the teacher, the content, the materials, as well as the programme should also be performed.

## Training programmes and credentialling in gastroenterology

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### INTRODUCTION

The practice of medicine and gastroenterology in particular has altered out of all recognition over the past 40 years. In the 1950's and 60's clinical "specialization" implied a hospital-based post in general medicine, general surgery, or gynecology. The proliferation of medical research after the Second World War, largely in America, paved the way for the establishment of subspecialties within general medicine and with expansion of knowledge and the increasing complexity of procedures. Most hospital specialists now devote essentially the whole of their professional career to the management of diseases of one organ or group of organs.

Specialization in medicine and the establishment of specialist societies has raised the question who should be referred to a specialist in a specific field. There is now a general acceptance that to become a specialist a doctor must not only pass a primary medical qualification and undertake a period of postgraduate training of a general nature, but he or she should then embark upon a course of training in the specialty leading to some form of certification that has legal standing.

Certification is an accepted part of the healthcare system. The rapid pace of change in technology and knowledge within medicine has given rise to concern that

doctors may not keep up to date with the advances in their specialty. An example has been the introduction of laparoscopic surgery, a technique that some older surgeons have had difficulty in coming to terms with. The idea that someone should be certified at a point in time and that it should stay in force until retirement is now in question. There is now a lobby which supports the view that doctors should undergo revalidation or recertification during their professional life to ensure that they remain competent and up-to-date.

### WHO SHOULD BE RESPONSIBLE FOR ACCREDITATION

Credentialling procedures vary among different countries. One problem with the of specialists is that medical practice in different countries has arisen in a historically diverse manner. The ultimate responsibility for ensuring safe medical practice should lie with the national government. In practice, governments are not competent themselves to regulate the activity of professionals. They, therefore, delegate this responsibility to quasi-government organizations composed the professionals themselves. In the European Union it is necessary to satisfy the European Board of Gastroenterology if a doctor wishes to have accreditation in more than one country of Europe. A further difficulty is that endoscopy, for example, is undertaken by radiologists, general practitioners, physicians, surgeons (or in Britain and America, nurses). Each country has to have its own form of credentialling with the opportunity, however, for reciprocal recognition of other countries or individuals.

### PRINCIPLES UNDERLYING CREDENTIALLING IN GASTROENTEROLOGY

When the responsibility for medical education passed from the apprenticeship system to the universities, a qualifying exam was instituted, following which the individual could practice independently. Later on it was recognized that a further period of apprenticeship was required after qualification leading to an "intern" year. In many countries now the intern year is followed by a period of general medical education, which may be terminated by an exit exam, following which the pupil moves to higher medical education within a specialty. Specialized postgraduate education used to follow the old apprenticeship system, but more recently it has been recognized that aspiring specialists will gain better experience by joining a rotational system in order to come into contact