


GILL TREMLETT

CPHE

CURRICULUM DESIGN IN NURSING



***A Practical Guide
For Course Planners***
Jean Heath

CPHE

Curriculum Design in Nursing

A PRACTICAL GUIDE FOR COURSE PLANNERS

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FOREWORD

This book is offered as an aid to those who are faced with the task of having to plan courses without the necessary background training in curriculum design.

A simple yet effective structure is presented which takes into account current thinking in both nursing and education.

It offers a framework for making decisions in a logical sequence of steps. This framework can be effective whether the planning is for statutory or in-service courses, for a seminar, a workshop or a formal lecture.

The relevance and quality of the design is measured by the extent to which it facilitates learning in those we plan the courses for.

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Glossary

AIMS

A statement of intent so that students and staff are fully aware of the intentions of the course planners. A clear aim is an essential first step in the development of a course.

ANALYSIS

"The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear, and/or relations between the ideas expressed are made explicit. Such analyses are intended to clarify the communication . . . "
(Mager 1975)

CURRICULUM

"A programme of activities designed so that learners will attain, as far as possible, certain educational ends and objectives . . . "
(Hirst 1970)

It is the total of all teachings together with strategies and techniques. It has four basic elements:

Objectives	--	Content
Methods	-	Evaluation

"An attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice".
(Stenhouse 1974)

OBJECTIVES

- Educational Objectives "Explicit formulations of the ways in which students are expected to be changed by the educative process, i.e. the ways they will be changed in their thinking, their feelings and in their actions".
(Bloom 1972)
- Affective Domain Objectives Objectives relating to human behavioural characteristics concerned with values, attitudes and emotional sets or biases.
- Cognitive Domain Objectives Those relating to thought processes.
- Psycho-motor Domain Objectives Those relating to physical actions.
- Taxonomy of Objectives Behaviours classified on a continuum or in a hierarchical order e.g. in Bloom's Taxonomy of affective domain objectives -
awareness of . . . comes before - attending to . . . which comes before - valuing.

EXPERIENTIAL LEARNING

Meaningful learning which involves the learner gaining insight and understanding by some form of active participation.

SYSTEMATIC APPROACH

- in the context of this book:-
a logical sequence of steps
which involves a careful
analysis of the setting,
the constraints, the learning
needs, the organisation of
learning and evaluation.
This is sometimes referred
to as the Objectives model
or the Tyler model.

FURTHER READING

EATON J (1975)

An ABC of the Curriculum
Pub. Oliver and Boyd,
Longman

SUGGESTIONS FOR USING THIS BOOK

At the end of each section I make suggestions for your action. If you work through these 'suggested actions' you will have experienced the planning process as advocated in this book.

On the other hand you may wish to read through the book first and then return to the activity sections. They are summarised on the next page.

Suggestions for further reading are incorporated throughout the book but these are kept to a basic minimum.

This book has been planned for those who are concerned primarily with the planning of courses for nurses. The student of Curriculum Development and Design will need a much wider base for her study.

SUGGESTED ACTION SUMMARY

You may like to use these as possible objectives for you to achieve.

1. Reflect on your position in relation to the different views of education presented here, or you may like to consider how you view teaching. The questionnaires on pages 10 & 11 may help you clarify some aspects of this.

2. Consider the constraints on the planning and decision making for your course.

3. Make the first draft of the aims of your course.

4. Draw your conceptual maps.

Organise related concepts and themes into units or modules.

Consider the time you have available and try to allocate the material appropriately.

Consult with subject specialists for comments on the course framework.

5. Consider the course aims you have written and the framework of the main concepts.

Take each module or unit of learning in turn and write the first draft of objectives for the course.

Ask for constructive criticism from colleagues.

6. Consider each objective you have written. List the learning experiences you feel will best help the learners achieve them, bearing in mind that practising a skill will lead to proficiency.

Can you suggest other factors which will encourage skill acquisition?

7. Consider what assessment techniques you will use to help ascertain if learning objectives have been achieved.

Consider what strategies you will employ to evaluate design issues and implementation of the course you have planned.

Introduction

When planning any course, decisions have to be made about what is to be learned, why it should be learned, when and how it is to be learned and how learning is to be assessed. A systematic approach to curriculum design offers a useful framework for decision making. This involves defining aims and objectives, a consideration of teaching and learning strategies and an integrated plan for evaluation. This approach *can* provide the course planner with an efficient tool to produce a course outline, but the resulting course may not provide nurses with the right skills to do their jobs. It all depends on the kinds of decisions which are made. These should be firmly based on a careful analysis of what we are attempting to do and what kind of person, with what kinds of knowledge and skills, we, as planners, would like to see at the end of the education and training programme.

There is a need to get away from too narrow a view of the curriculum with its emphasis on content and time-tabling, and see it rather as a dynamic concept, reflecting our values and attitudes, embracing students' needs, and taking into account teaching styles and learning climates. The resulting plan can be an integrated, harmonious whole.

CONTRASTING VIEWS OF EDUCATION

In general education different approaches can be identified which reflect, to some extent, the changing social climates. In a teaching situation we might find a mix or adaptation of any of the following:-

The mental discipline approach -
education should concern itself with mental functioning or habits of thinking.

The classical approach -
assumes the learners are passive instruments to be manipulated. The teacher may assume a role of benevolent autocrat, attempting to realise her objectives by motivating, controlling and modifying learner behaviour by some variant of the talk and chalk method. It is essentially task-centred and teacher controlled.

The romantic or humanistic view
is essentially learner-centred and related to discovery learning.

A 'modern' approach
assumes that students are natural decision makers and problem solvers. The emphasis is on the process i.e. enquiry-centred, experience orientated rather than content or method. Instead of thinking of factors separately there is an emphasis on integration and synthesis.

FURTHER READING

GALBY M et al
editors (1975)

Curriculum Design

Ideology and the Curriculum
by Fred Ingles pp 36-47

OU publication

Suggested Action 1

Reflect on your position in relation to the different views of education presented here, or you may like to consider how you view teaching. The questionnaires on the next two pages may help you clarify some aspects of this.

For example, you may consider yourself to be a very democratic sort of teacher. Try to identify your position in relation to the points of view presented below as honestly as possible.



All policy should be determined by the instructor

Policies are a matter for group decision encouraged by the instructor



Learning steps are presented one at a time

Overall course perspectives sketched out at beginning of programme



Instructor dictates work to be done

Division of work decided by group



Instructor remains aloof from active group participation

Instructor a regular member of the group, facilitating not directing



Instructor "personal" or subjective in his praise or criticism

Instructor objective or factual in his praise or criticism

You might also like to consider the following statements and decide whether the behaviour suggested is:

a. desirable and b. feasible a. b.

<p>The students (course members) must be able to:</p> <ul style="list-style-type: none"> - set their own personal goals related to their work within the constraints of nursing care 		
<ul style="list-style-type: none"> - develop their own approaches to the achievement of these goals 		
<ul style="list-style-type: none"> - seek criticism from teachers and colleagues 		
<ul style="list-style-type: none"> - collect relevant data and utilise it for solution to problems 		
<ul style="list-style-type: none"> - audit their own performance or that of a colleague using established criteria 		
<ul style="list-style-type: none"> - learn and think independently and learn from experience 		
<ul style="list-style-type: none"> - acquire independently information that is usually transmitted by traditional lecture courses 		
<p>A function of a teaching institution should be to help students find solution to nursing problems.</p>		

Adapted from a discussion paper by J J Gilbert, WHO, Geneva, on Basic Issues in Curriculum Design and Implementation (30 November 1977).

I would not suggest that there is a right or wrong position, but rather that, as teachers, we should try to discover where we stand. When planning a course the value systems of the planners will be reflected in varying degrees.

*We should recognise that
our beliefs and values
regarding nursing, teaching
and learning, will
influence the decisions we
make about the courses we
plan, will influence the
way we teach or the
learning experiences we
choose for our students.*

Choosing a Model

There has not been a great deal written about curriculum planning models for nurse education in this country. Much has been written by the American nurse educators and, as American students are college based, we often dismiss their ideas as not being applicable in Britain. However, I would suggest that we take an eclectic approach by selecting and adapting to fit our own particular needs.

The needs based model (Starpole & Waltz, 1978)

The philosophy behind this approach is that if students can identify their needs in a learning situation, the learning will be more meaningful because it is directly related to the experiences and current needs of students. For the trainer this necessitates a careful analysis of the situation the student is being trained for and an identification of all the knowledge, skills and attitudes which are likely to be required of the trainee in order to equip her/him to perform effectively. It necessitates regular appraisal of the individual student's needs in relation to his/her choice of learning objectives. This model has many attractions for those who wish to encourage their students to be self-directed. It lends itself particularly to post-basic courses but I feel it is rather difficult to implement in a pure form with large groups of students taking a National Certificate. However, this approach can be integrated into seminar and tutorial sessions and could be most useful in the practical situation.

The problem solving model

This approach stresses the importance of the learning *experience* rather than the collecting of information i.e. the process of learning rather than the products of learning. It involves asking questions of the students, setting them problems, and encouraging them to find the answers. The attractions of this approach are that students, hopefully, are equipped with the skills for updating and renewing their information, they do not view teacher figures as being the main source of knowledge and they tend to be self-directed and motivated, taking responsibility for their own learning.

The Nursing Process, with its systematic problem solving approach to Nursing Care, might easily adapt to this curricular model. For example, learning could be arranged around some of the following questions.

1. On Assessing

- What information do I need to collect?
- How much and why?
- How best can I collect the information needed?
- Where do I get information from?
- How do I record this information?

2. On Planning

- Do I have the necessary skill to plan effectively?
- How shall I know which problems are priorities?

3. *On Implementing the Plan*

- Do I have the necessary skills and knowledge to carry out nursing plans?

4. *On Evaluation*

- How shall I know if my actions are effective?
- By what criteria shall I assess my own behaviour and that of my colleagues?

This might be a promising model but I think at this present time it would be very time consuming to build the curriculum totally around it. I would prefer to see this approach being used to draw together, in a meaningful way, different aspects of knowledge and experience the students may have, thus enabling the students to integrate theoretical knowledge gained in the classroom with practical experience gained in the ward, and to focus their attention on the care of the individual rather than diagnosis and treatment.

In a similar way to the example suggested for the Nursing Process, it would be feasible to model a curriculum around the "needs of man" and the components of basic nursing care as described by Virginia Henderson (1969) for example:-

- Helping patient with
- respiration
 - eating and drinking
 - elimination
 - maintenance of posture etc.
 - rest and sleep

(Taken from page 19 'Basic Principles of Nursing Care' by Virginia Henderson, revised 1969, published by the International Congress of Nurses.)

The systematic model

This model has been in vogue for some years. In its earliest form it was written about in 1949 by Ralph Tyler, often referred to as the Tyler Model. It became popular in the late 60s when programmed learning was in vogue. Industrial training schemes have adopted this model. It is used widely in the training schemes of the services i.e. Army and Navy. It has been written about in the nursing press in this country since 1970 by Sheila Marson, who applies this model to the design and development of self-instructional teaching materials for nurses.

This model asks us to consider the answers to the following questions:-

- What educational goals should we seek to attain?
- What educational experiences can we provide that are likely to attain these goals?
- How shall we organise the learning experiences?
- How shall we determine whether these goals are being attained?

If we are concerned with efficiency and are able to say what we would have our students know and do then this model is worth considering. It need not constrain or confine the learner in the pursuit of identified objectives but will enable the course planner to decide on minimal core issues i.e. those aspects which are essential.

Curriculum building is seen as an orderly process of decision making, an assessment of needs, a detailed plan of action and evaluation of the process and the final outcomes. There are many ways of presenting the systematic framework

(see figure 1). I see it as an integrated cycle, each part of the decision making process affecting and being affected by the other parts. This model is constantly being reviewed and updated in the light of the changing context and can accommodate most views of nursing education. It is applicable to any training situation at whatever level. It can be used equally well for the planning of one lesson, or for a complex 4-year programme. It is adaptable to different teaching styles and to the pendulum swing of "educational fashion".

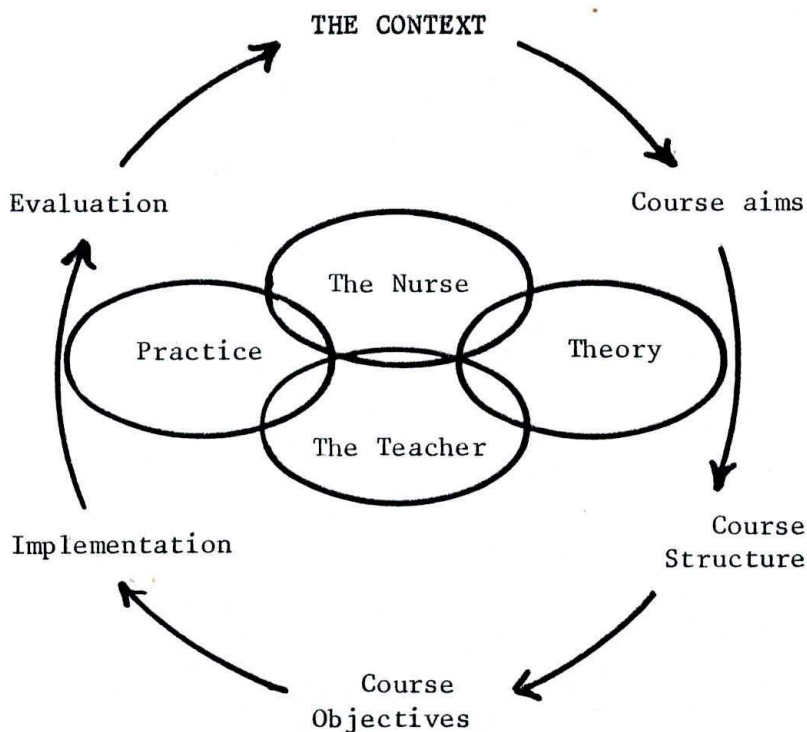


Figure 1 A Systematic Model

Assessing the Task

Education, in general, focuses on what is to be learned, and who is learning. In nursing the focus widens to embrace the patient, the environment and the caring team. Many would say that the whole purpose of a nursing course was to produce a safe practitioner. We need to ask then - what do we mean by a "safe practitioner"?

In some cases it might mean - a person who can carry out simple nursing procedures without supervision.

Other examples might suggest:

- a person who can make nursing decisions, plan nursing action, coordinate care, solve management problems, initiate research or decide on future nursing policies.

At one end of the continuum then we have simple psychomotor skills and at the other the skills involved in professional and personal development. As a course planner it is important to spend some time considering this kind of issue and ask the question -

- What kind of *end product* have we in mind? Are we maintaining the status quo or are we taking into consideration current changes in the social climate?

Another major influence on nursing and nurse education today is "The Nursing Process"*. This is a systematic, problem-solving approach to individualised nursing care. The focus is on the

* See bibliography for further reading.

patient and his needs and each plan of care is carried through and evaluated. The main nursing goal is to work towards that which is normal for each patient. The knowledge needed by the nurse is centred on the patient and his or her needs. Skills needed include the ability to:-

- '- observe the patient in his environment
- assess and state his needs
- instigate action if required
- seek assistance if required
- interpret and carry out prescriptions and report on the results
- communicate with patients, relatives and colleagues
- organise and teach other nurses in the health team
- assess critically and evaluate her own work and that of her colleagues'.

[This is the profile of professional responsibility drawn up in connection with the nursing directives for the EEC.]

When choosing and organising curriculum content, a study of the needs of the normal healthy person should be considered before moving on to the breakdown of health.

The *way* we teach can influence the student, too much giving of information can encourage our learners to be dependent. If we would wish to encourage accountable problem solvers then we need to bear this in mind when considering learning experiences. If we are always the ones who evaluate and assess, how will the learners gain skills in evaluating the care they give and

assess their own performance and that of others?

CONSTRAINTS ON PLANNERS

Before setting out the educational aims of your course it might be useful to identify some of the constraints affecting your particular situation (see Figure 2). I have listed some which might affect any curriculum planner. These have been divided into - external factors i.e. those which affect the general organisation of the course, and over which you may have little or no control, and internal factors, those which relate to the immediate teaching/learning transaction.

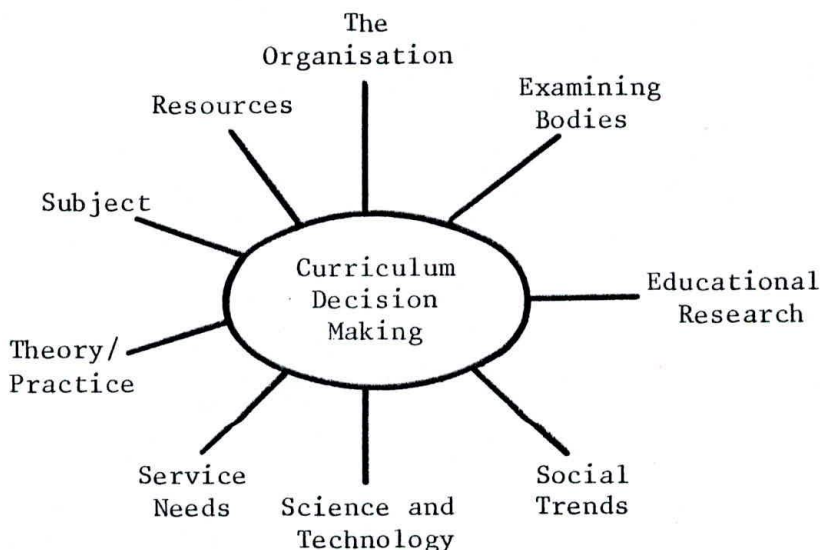


Figure 2 Factors affecting decision making

External Factors

- *expectations of the organisation* - if you have been appointed to put on a series of courses it would be useful to agree aims with those you are responsible to at an early stage of planning.
- *organisational constraints* - time available, day or block release, in-service or own time.
- *resources available* - course rooms, money for resources, books, hire of AV media, AV equipment, specialist lecturers, practical experience.
- *accountability* - is it necessary to produce hard facts as to the success of your course? Will your educational aims and objectives and your evaluation results be publicly available? e.g. State examination, JBCNS certificate.
- *subject specialists* - course planners are not necessarily subject specialists. Will you have adequate support and backing at the subject level?
- *subject matter* - the nature of the subject may affect the design of the course. i.e. Intensive Care Nursing, psycho-sexual counselling, group interaction or coronary care.
- *research reports* - is the course you are planning a direct result of a recent piece of research? Its findings will have a direct influence on your course aims.
- *social trends e.g.* - the likely increase in the number of aged in the community in

the year 2000

- The move from an autocratic to a democratic social climate may influence teaching plans and decisions.
- *new scientific and technological advances*
- *course levels* - if the course is part of an ongoing training scheme at different levels e.g. introductory, intermediate, final, then consultation will be necessary with other course planners to make sure you are not providing similar experiences for your course participants.

Internal Factors

- *the students* - it is necessary to identify their learning needs, taking into account their present knowledge and experience.
- *the teachers* - their teaching styles and educational values. Teachers may be excellent in the lecturing situation, their blackboard summaries a joy to behold, but they may feel very uncomfortable with the open ended discussion approach. It is as well to know your staff and their particular strengths before planning learning experiences.
- *learning theories* - educational experiences should be planned, taking into account the theories connected with how people learn.
- *the service needs* - if your course is connected with a speciality, then it is vital to have the fullest co-operation of the specialist staff. Service staff should, if possible, help draw up the educational goals for the course and be committed to enabling learning

in the practical setting.

FURTHER READING

ROBERTS K (1981) 'Futurizing' the Curriculum -
nursing education in the year
2000.

Australian Nurses' Journal
Vol 11 No 3 Sept 1981
pp 49-52

Suggested Action 2

Consider the constraints on the planning and
decision making for your course.

Identifying Aims

"An aim can broadly be defined as a general statement, which attempts to give both shape and direction to a set of more detailed intentions for the future" I K Davies (1976). It is an ideal, an aspiration, a direction in which to go, but it must be constantly re-defined in the light of experience and subsequent action.

A statement of aims is a way of making public your educational intent.

You may be involved in planning programmes for staff development, so before starting to write your aims it is advisable to make some rough notes on why you think a course or training programme is needed. It is also useful to get the opinions of colleagues, service staff and potential course members. In this way it is possible to suggest the distinctive 'need' for the course you are about to plan. Some thought should be given to the prospective course members. What knowledge, abilities and attitudes do you think they should have after your course? It would also be useful to provide the potential students with reasons for their participation in this course, whether for better career prospects, improved knowledge and efficiency, to gain an extra certificate or, opportunities for further study.

It is important to write down as many answers as possible to the question: "What do I want this course to achieve"? These answers are the first rough statements of the course aims. They can later be edited, inconsistencies removed, and repetitions eliminated.

The final aims should be written in such a way that they suggest directions for teaching and learning.

Example of a course aim

From "Care of the Elderly in Hospital and Community"*

- The philosophy of the approach in this course is to encourage staff not to consider ill health as synonymous with the ageing process.

Suggested Action 3

Make the first draft of the aims of your course.

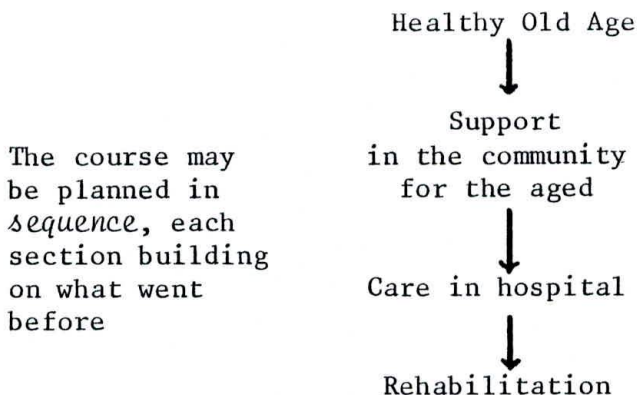
* Published by the NHS Learning Resources Centre

The Conceptual Framework

THE ORGANISATION OF COURSE CONTENT

Jerome Bruner (1966) says ". . . knowledge which has been acquired without sufficient structure to tie it together is knowledge that is likely to be forgotten. An unconnected set of facts has a particularly short half-life in memory".

Taking into consideration the course aims and the learning needs of the students, list the main topics, subjects, experiences or concepts which you feel should be incorporated into your course. This list should be organised to show the relationships of each item, for example,

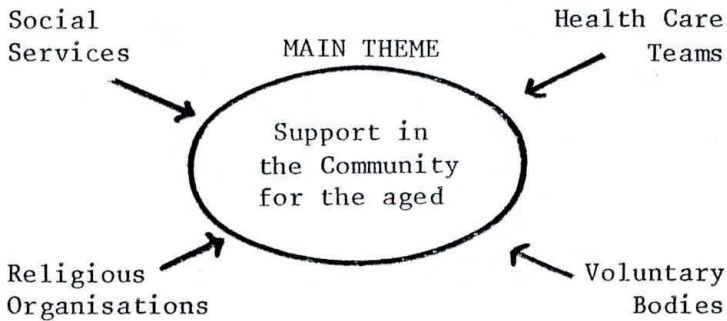


This example reflects to me the general philosophy of the Nursing Process in its approach i.e. considering first what is 'normal', then what contributed to the breakdown of health and how we might plan to work towards rehabilitation to the norm for each individual.

The organisational thread running through a course may be a major theme, such as 'prevention of cross

infection' in a course of study in operating room techniques thus providing *continuity*.

Other elements may be introduced relating to main themes, these should be *integrated* appropriately e.g.



This may be quite a simple matter, it might be extremely difficult or there may be several choices open. It is necessary to keep the course aims in mind and continually ask yourself - "What learning experience will be useful?" - "What points do I want to emphasise?" - "What information might the students need?"

If an organising thread is not immediately obvious you may find it useful to make a 'map' (Buzan 1977). You may like to try the following exercise.

The main topic is written in the centre of a large sheet of plain paper. Sub topics are added, rather like branches of a tree in any order or position. Themes or concepts can be built up easily and quickly making smaller branches. This technique allows a free flow of ideas at an early planning stage. Example 1 (Figure 3a, b and c) shows how you might approach a plan for an Introductory

Course incorporating the philosophy of the Nursing Process.

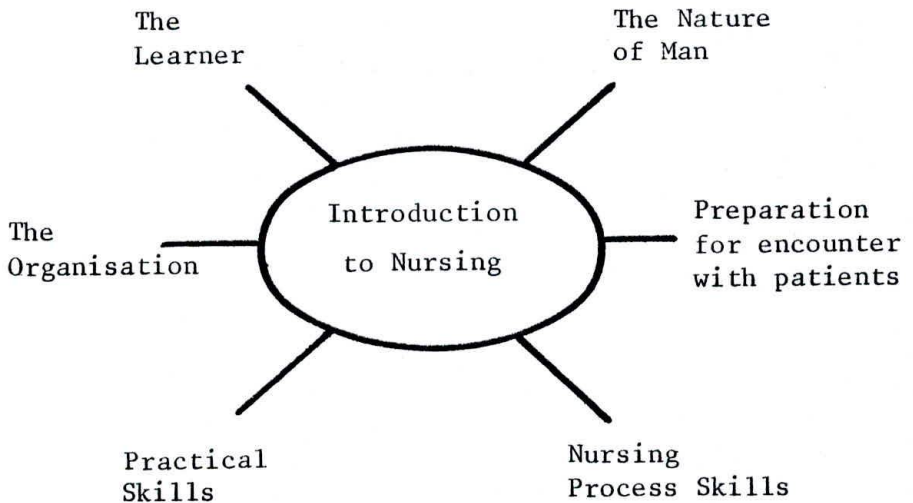


Figure 3a Making a Concept Map

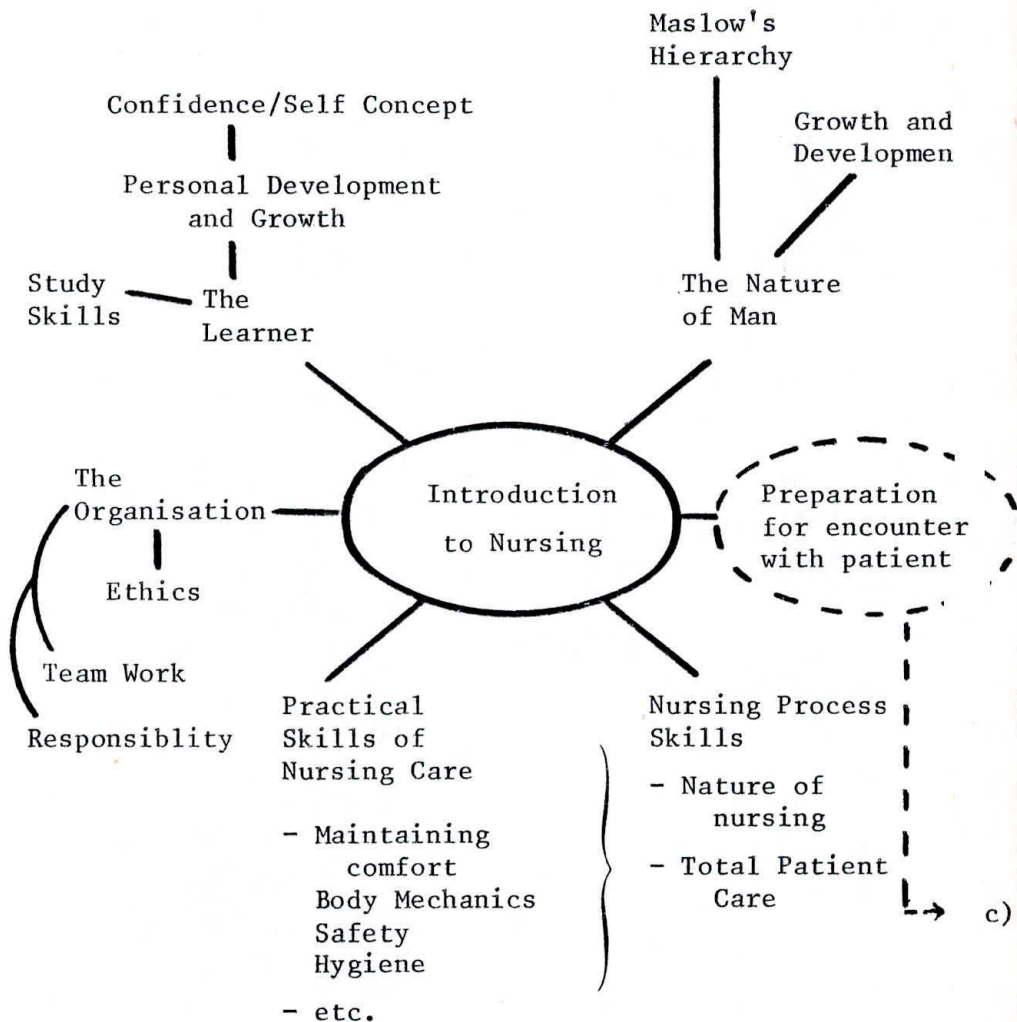


Figure 3b Making a Concept Map

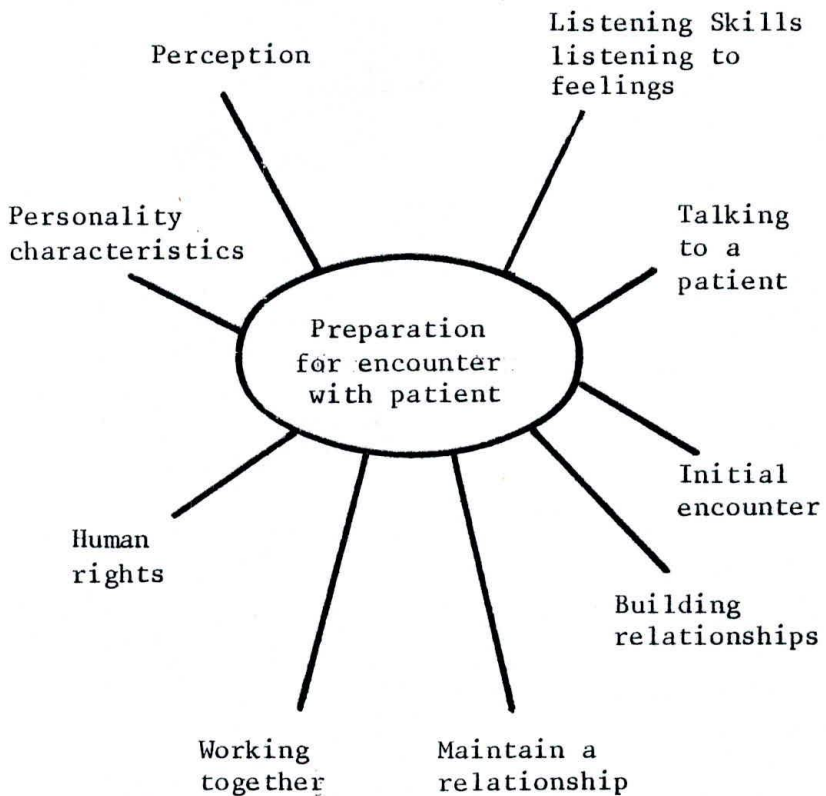


Figure 3c Enlarging on one aspect of the
'Main Theme' concept map

Example 2

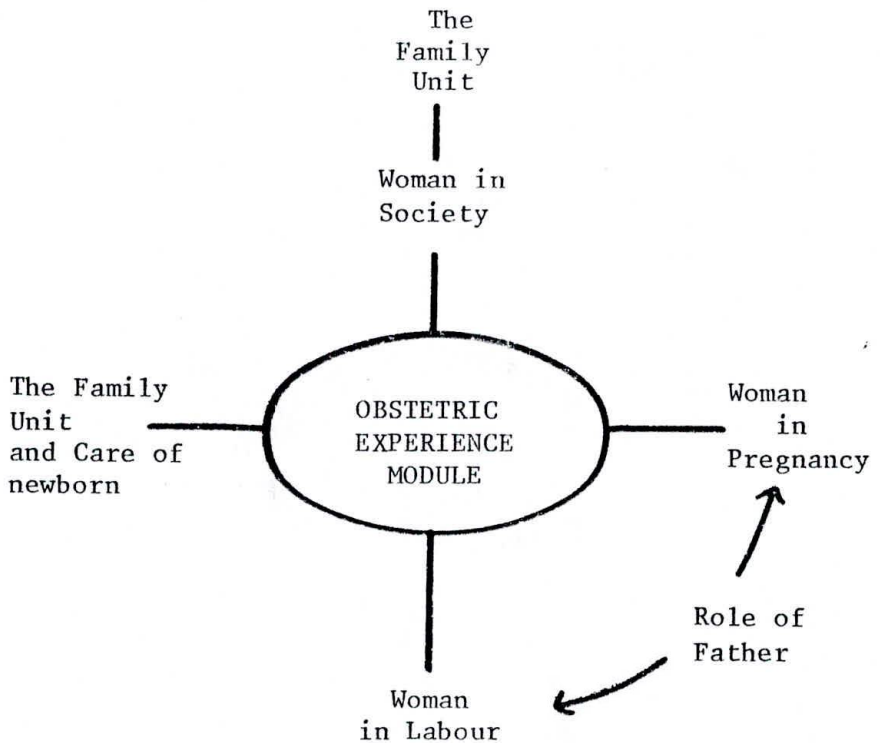


Figure 4a Shows an early plan of an Obstetric Experience Module

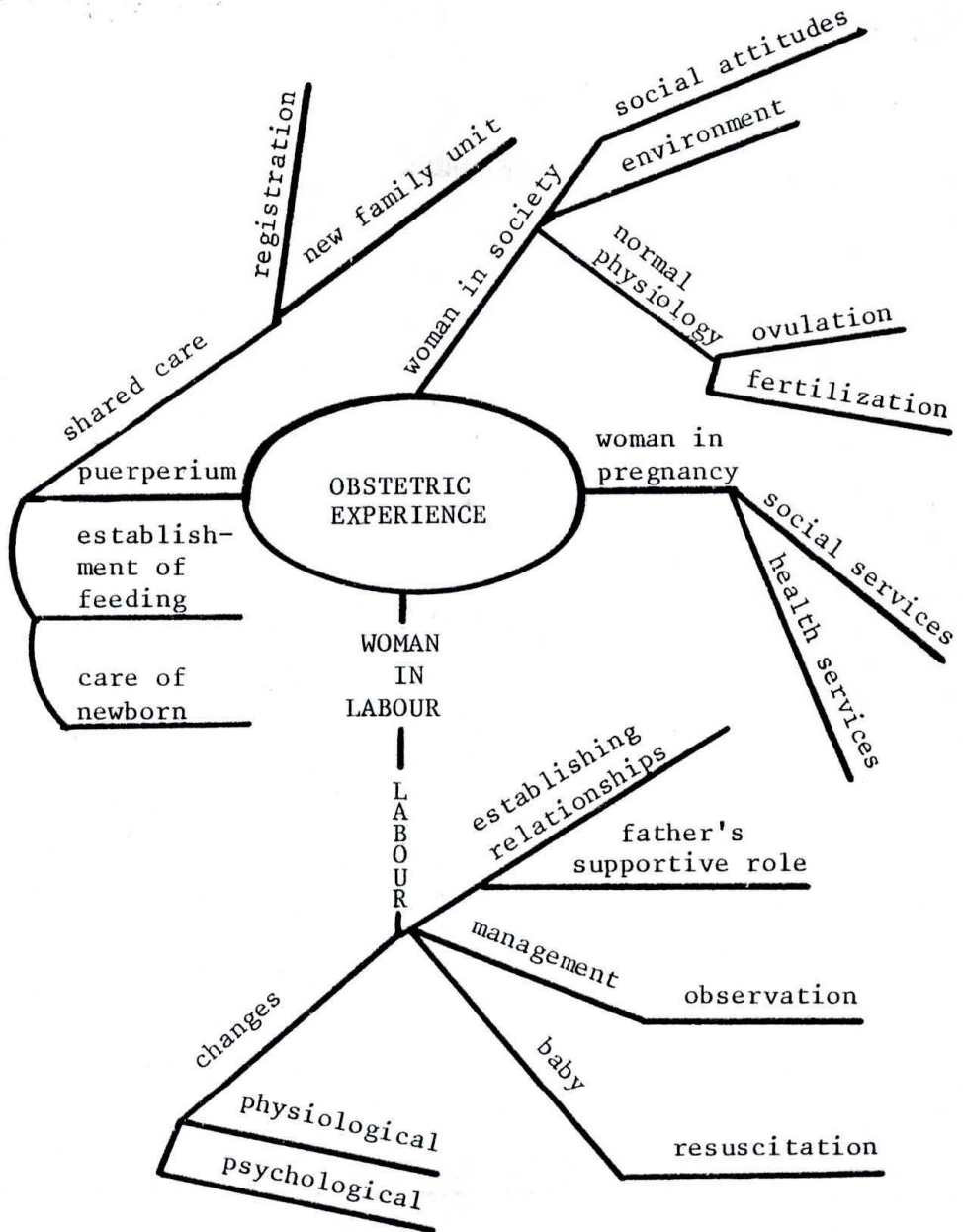


Figure 4b A Later Plan

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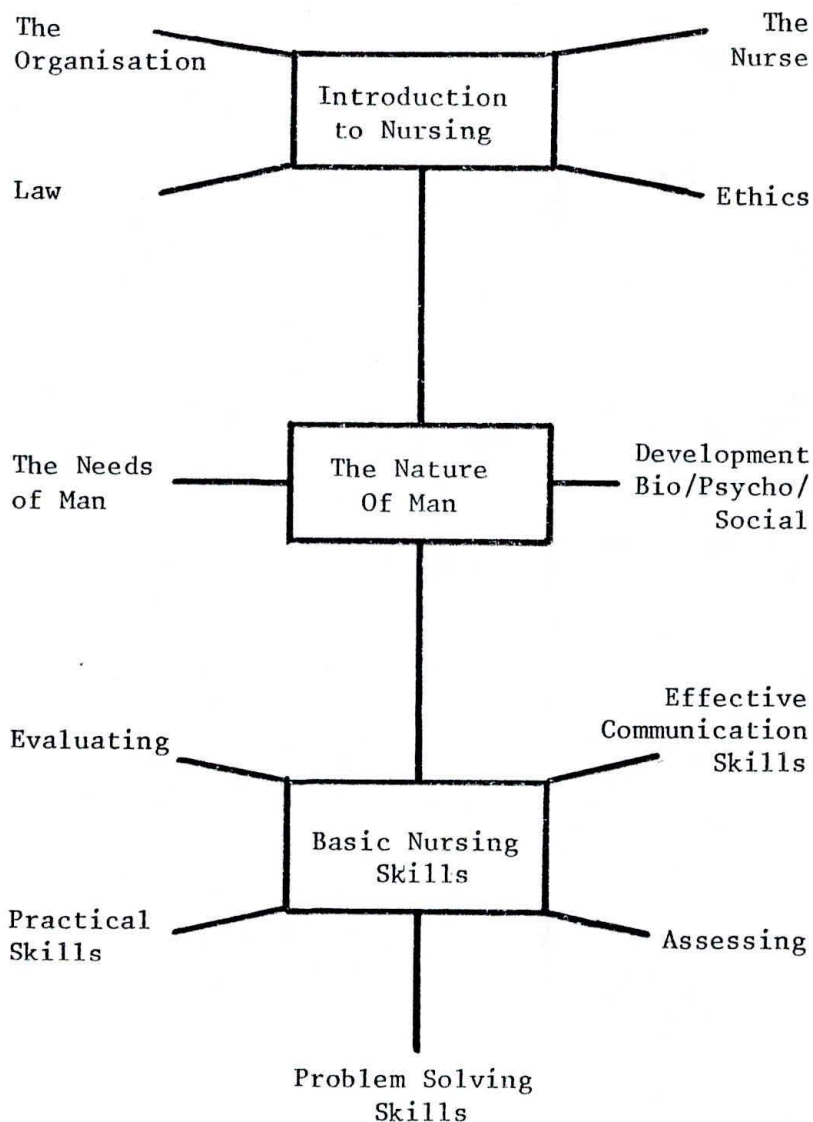


Figure 5 Organising related Concepts and Themes

(from Fig 3a, b and c. Introduction to Nursing)

This exercise may also help to break down rigid patterns of thought and help you to view your topics from a different perspective. Well organised material can influence greatly the efficiency of instruction.

The next stage is to organise the material in relation to the time you have available and within your identified constraints. If you find that you have many more topics than time available, look again at your aims and decide on priorities.

The next stage of your plan might look like figure 5, which suggests how the maps on figures 3a, b and c might be organised.

Suggested Action 4

- Draw your conceptual maps
- Organise related concepts and themes into units or modules
- Consider the time you have available and try to allocate the material appropriately
- Consult with subject specialists for comments on course framework

Curriculum Objectives

Learning objectives identify what is to be learned, whilst aims for a course are general statements of a teacher's hopes: Objectives are concrete statements about the student's learning activities. A statement of objectives may not define everything that may be learned, nevertheless it focuses both the teacher's and learner's mind on central issues which must necessarily be mastered.

Attention is focused on learning rather than teaching or subject matter e.g. the learner may be required to:-

identify . . .	demonstrate skill in . . .
list . . .	explain . . .
describe . . .	write . . .

Advantages of defining objectives (Davis 1971)

- they provide a complete summary of the course for the teacher
- they provide the learner with a clear account of what he/she is expected to learn/do
- they enable the teacher and the learner to distinguish between different varieties of behaviours and so help them decide which learning strategy is likely to be optimal
- they ensure that measurement is possible so that the quality and effectiveness of the learning experience can be evaluated.

General rules for writing objectives

(after Gronlund 1970)

The performance required from the student should be stated, not that from the lecturer.

The learning outcome is stated not the process.

When planning a course, objectives are usually stated in broad, general terms and become more specific at the level of student/teacher interaction.

Examples of curriculum objectives from 'Curriculum in District Nursing' course.*

- "To assess and meet the nursing needs of patients in the community.
- To apply skills and knowledge and to impart them effectively to patients, relatives, other carers and the general public.
- To be skilled in communications, establishing and maintaining good relationships and able to co-ordinate appropriate services for the patient, his family and others involved with delivery of care.
- To have an understanding of management and organisation principles within the multi-disciplinary team and a positive approach to future developments to meet health care needs."

* Taken from:

Curriculum in District Nursing for State Registered Nurses and Registered General Nurses. Drawn up by the Panel of Assessors for District Nurse Training.

If you are planning nursing experience modules using the framework of the nursing process, you may wish to consider the skills which are needed for the practising nurse for each step of the process. For example:-

1. *Assessing skills*

Interviewing

- listening
- awareness of own prejudices and values

Observation skills

Measurement, recording, classifying

Inferring from information received

Comparing, identifying

Discriminating, judging, analysing,
synthesising

2. *Planning skills*

Analysing

Goal setting

Objective stating

Prescribing action

Identifying

Priority stating

Hypothesising

Communicating

3. *Implementing skills*

Organisation skills

Communication skills

Interpreting

Inferring
Re-assessing
Judging
Psychomotor skills

4. *Evaluating skills*

Defining criteria
Assessing information collected
Assessing own behaviour
Assessing others' behaviour
Judging
Interpreting
Adapting
Communicating

Suggested Action 5

Consider the course aims you have written and the framework of the main concepts.

Take each module or unit of learning in turn and write the first draft of objectives for the course

Ask for constructive criticism from colleagues.

Books you may like to refer to:-

- | | |
|------------------|---|
| DAVIS I K (1976) | Objectives in Curriculum Design
Pub. McGraw-Hill Book Co. |
| MAGER R F (1962) | Preparing Instructional Objectives
Pub. Fearon Publications |
| REILLY D (1975) | Behavioural Objectives in Nursing
Pub. Appleton Century Crofts |

Appendix A gives an example of how objectives may be written, relating Nursing Process to ward and school experiences. (Pages 70-78)

Learning Experiences

By defining desired educational outcomes, the curriculum builder has the most useful set of criteria for suggesting learning experiences. Decisions about what learning experience will best help the learner to achieve the stated objective must now be made.

Learning takes place through the active behaviour of the student rather than anything the teacher does. The teacher may be giving an excellent lecture on Otitis Media, and two students, sitting side-by-side in the class, may be having very different experiences. Student A has been working on ENT ward and is relating and making connections with her experience and past knowledge of the anatomy of the ear. Student B however, may have a GNC assessment the next day and be planning how she will cope with that experience. The teacher can, however, help to enable learning by selecting learning experiences with which the students can react and which will match your educational objectives. The emphasis here is firmly on learning and the learner - the teacher is seen as the manager of the learning and the learner as active participant.

General guidelines

The choice of learning experiences will vary with the kind of objective aimed at, but there are some general guidelines.

1. The student must have experiences which give him opportunity to practise what he has learned e.g. if the objective says . . . "the student will develop skill in problem solving" this cannot be attained unless the student has

ample opportunity to practise solving problems.

2. The learning experiences must be such as to give the student some positive feedback that he/she has learned 'correctly', that what has been learned is seen to relate to his work or experience, that some good use can be made of this knowledge or skill and that the information provided for study must be valid, up-to-date and related to the learner's needs.
3. The learning experience planned must be related at some point to the student's knowledge or experience i.e. the teacher must begin from where the student is.
4. Different learning experiences can be used to meet the criterion of a particular objective, thus the teacher has a wide variety of choice at her disposal when planning particular activities.
5. The same learning experience can bring about several learning outcomes. A well planned set of learning experiences can be economical in terms of time.

Before considering which learning experience will best help your students achieve their objectives, you may wish to read through the following list of strategies or approaches (Bligh 1972). It represents some of the techniques and tools the teacher may use. The good teacher will have a variety of approaches in his or her repertoire of teaching and facilitating skills. Approaches which demand the personal involvement of the student are more likely to be effective.

APPROACHES

COMMENTS

* *Brain Storming*

A technique which encourages the generation of new ideas and solutions to problems. Items are listed randomly as they come to mind, initially suspending all criticism. Ideas are later submitted to analysis, synthesis and evaluation

Useful in helping:-

- to foster creative thinking and generating original solutions to problems
- to plan projects or solve individual problems.

This is difficult to manage in large groups (8 - 12 a reasonable number).

* *Buzz Groups*

A form of discussion group where a large group divides into sub-groups to consider briefly a specific problem.

Everyone gets a chance to contribute and a cross section of opinion can be gained in a very short time. A clear definition of the topic is essential.

* *Case Studies*

Real or simulated problems are analysed and possible solutions to problems are discussed.

Encourages the exploration of complex inter-relationships. Good method for helping people to participate orally, to think through and 'feel into' the roles of the persons

concerned in the case study

- participants must be given adequate information and enough time for reasonable discussion.

* *Demonstration*

Visual presentation of a technique, process or skill, accompanied by explanation of facts, concepts and principles to be learned.

An effective method in helping to link theory and practice.

- learning objectives must be clear to students
- everyone must be able to see and hear
- each learning step should be understood before proceeding to the next one
- participation and practice essential for learning
- requires careful planning and rehearsal.

* *Discussion*

A group activity which involves sharing of ideas. It may take the form of:-

- encourages development of the thinking process and a willingness to receive

- group tutorial - general topic and direction given by the teacher
- free discussion topic and direction controlled by students.
- and consider new ideas
- more effective with small group
- is time consuming
- difficult to evaluate learning
- if teacher centred - good leadership is necessary

* *Lecture*

A formal talk on a specified subject.

A one way communication, giving information or instruction.

- presents prepared information to a large group in a short time
- can be used to introduce a topic for in-depth work or to summarise
- we generally remember about 10% of what we hear
- teachers cannot tell if concepts are being understood
- information could be given as a 'handout'.

* *Projects*

- may be individual or group activities.
- encourages students to be self-directed to some degree

An in-depth treatment of a topic which may be teacher chosen but is generally student directed.

- requires commitment.

* *Role Play*

The unrehearsed dramatisation of a human relations problem, to help participants to become aware of others' feelings and ideas.

- allows participants to experiment with new ways of behaving or reacting
- situations can be devised which fit the learning needs of the students
- the participants need to be sensitive and open minded
- careful planning and clear understanding of learning goals is necessary.

* *Simulation Games*

Essential features of a real situation may be presented in simulated exercise.

- can encourage discussion and ideas sharing
- may improve problem solving skills.

Experiential learning strategies should also be mentioned here although some of the above could be classed as 'experiential'. The teacher, as facilitator, designs exercises to help the learner (as an individual) explore specific aspects of a given behaviour e.g. to experience listening in a simple exercise with another person, when considering basic communication skills.

The way we teach has a profound effect on students. They have often been conditioned to expect the teacher to *give* all the information. This reinforces the belief that only 'teacher type information' is valid. Students should be encouraged to use deductive methods, learn to *apply* the concepts, theories and principles and gain confidence in their own problem solving and decision making abilities. This approach can bridge the gap between theory and practice and build up the student's confidence in their own abilities.

The teacher's role is flexible and changes appropriately in relation to the demands of different situations -

- as giver of information
- as manager of learning or
- as facilitator of learning, enabling others to learn for themselves.

Look again at the Nursing Process Skills on page 37. An information base is essential before we can engage in complex decision making and problem solving activities, but students who are *only* given information will be ill equipped to cope with this approach to nursing.

Suggested Action 6

Consider each objective you have written.
List learning experiences you feel will best
help the learners achieve them, bearing in
mind that practising a skill will lead to
proficiency.

Can you suggest other factors which will
encourage skill acquisition?

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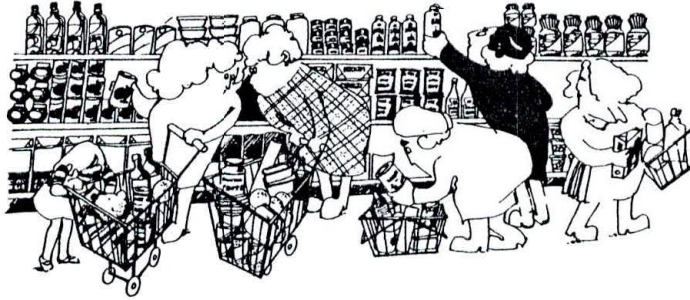
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Aids

CHOOSING AND USING AUDIO VISUAL TEACHING AIDS AND SUPPORT MATERIAL



Selecting media is a very subjective exercise

Audio visual aids, if used well, can widen the channels of communication between teacher and staff. The concept of teaching which is based solely on the teacher's voice and personality stems from the belief that communication is best achieved through the medium of sound. The user of audio visual aids believes that he can also communicate effectively through sight and touch. When the 'real thing' is absent, film, video, model, sound recording etc. can be incorporated into a lesson, supplementing the teacher's explanation, reinforcing, providing interest and motivation, improving instruction, students' understanding and retention.

Your choice of material to support or aid you as a teacher should be based on the learning objectives primarily rather than on what is easily or 'freely' available.

Using audio visual aids

Certain questions should be asked by anyone using an aid:-

- will the use of this aid help to attain the learning objectives?
- what responses or action do I require from the students?
- how shall I evaluate this?

Unless the aid you choose does help you to enable learning you may be well advised not to use it.

Another question you might ask is - at this stage of my lesson/course/demonstration, which type of aid will best suit my purpose?

- what is its purpose?
- does it specify objectives for learning?
- does it specify who it is designed for?
- does it relate to the syllabus and the aims of the course?
- does it assume or build on previous knowledge of the learners?
- is its content accurate, up-to-date and well presented?
- is its sound track clear and length appropriate?
- will my particular students find it interesting?



Some of the surprise elements may be eliminated by previewing media before use in a presentation.

Suggested Action 7

Consider what resources you need for each learning experience planned.

Consider what material you have access to in your own area. It may need up-dating, adapting, restructuring or just collecting together to be of use to you.

Evaluation

Evaluation is a strange mixture of values and science. In everyday English usage it suggests judging the work of something and that may raise questions like "Who is judging?" "What is being judged?" and "By what criteria?" These questions may be viewed simply and answered naively but the problem of evaluation is an extremely complex and difficult one.

Evaluation is a fundamental part of curriculum development. Its function is to identify aspects of a course where curriculum revision is necessary. It may take place at five levels.

- As an ongoing process during the planning stage when decisions are being made about issues such as "Which aims, which objectives, which teaching method or resource and how shall we evaluate?"
- Evaluation of the ongoing course, of the objectives set, the methods and media used or the educational practice of the teachers.
- An assessment of students' achievement of the objectives set, judging student performance for purposes of selection or grading, feedback to student of progress or deficiencies.
- Longer term or follow up evaluation data may be collected from the ex-course members or the supervisor in the service area where ex-course members are working.
- Information requirements at organisation/administration level.

Rather than get into deep water in this brief introduction to such a complex subject, I would prefer to point you to some of the literature and confine myself to comment on some of the issues presented.

The subjective nature of evaluation

Anything other than the single objective test or multiple choice question test gives rise to problems of decisions about values, both students' and teachers' values e.g. two teachers may grade an essay on 'factors affecting the elderly in the community' very differently. Have we any guarantee that what students say they will do on paper has any relation to what they will do in practice (Bendall 1975)?

How much use do we make of student feedback?

We can collect some fairly factual data by asking questions such as:-

- Were there too many lectures, too few tutorials, not enough practice?
- Do the students find the work load too great?
- Was the information presented difficult to follow?
- Did the students have enough support as a learner:-
 - in the classroom
 - in private study
 - in the practical setting?
- Did students feel they were prepared adequately to cope with their practical experience?

This type of questionnaire can provide useful feedback for the curriculum planners; provided we are clear about what we are trying to do, and can put to the students well structured questions seeking the kind of information which will help decisions about how courses should be modified, or how teachers should try to alter their behaviour. (Eraut 1977)

"Feedback to tutor after a course employing a student directed approach to study skills.

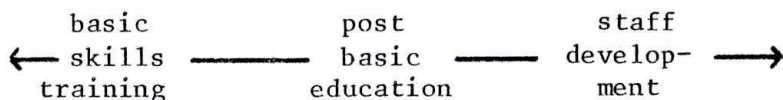
'This has been the sloppiest and most disorganised course I have ever taken. Of course I have made some progress, but this was due entirely to my own efforts. . . ' "

Learning to Study Graham Gibbs
OU Publication

How much do teachers gain from having their work examined?

Perhaps as the teacher sees it - very little. We must recognise that "human kind cannot bear very much reality". (T S Eliot, Burnt Norton). The risks involved in receiving detrimental feedback from our colleagues/students/administrators are great. We may discover that the students do not really care for us. We risk damage to our ego by finding out that we are not doing our job very well. Finding out about one's deficiencies can be a painful business and very few of us enjoy being evaluated.

If we consider nurse training and education along a continuum i.e.



assessment is relatively simple at most levels on the left hand side of the scale, e.g. a student who gives an intramuscular injection into the upper outer quadrant of the buttock, is more likely to succeed than the student whose action causes paralysis of the sciatic nerve. There is no debate about the many life and death issues on a nurse training course. At the right hand side of the continuum however, where decision making or open ended questions are involved, evaluation issues are complex.

The purpose of assessing students may be:-

- to provide the basis for guiding the learner's progress
- to determine whether or not the behavioural objectives specified have been attained
- to assess the success of the instructional strategies employed
- to provide the learner with knowledge of his/her attainments
- to help the individual learner identify his/her own strengths and weaknesses
- to provide a diagnostic means of identifying learning difficulties
- to determine whether it is

- appropriate to continue with the next learning sequence.

Assessment in this case is usually related to specified behavioural objectives.

Some of the assessment tools available to the teacher are listed below.

Essay questions

These measure the learner's ability to organise information and think logically, clearly and relevantly. They can provide information about an individual which will influence future teaching - e.g. value judgements expressed and attitudes adopted which may be incongruent with the educational goals of the course.

Tests

Short answer tests can be useful to measure the extent to which the learner mastered theoretical information e.g. multiple choice, true and false, sentence completion, filling in missing words e.g. to test factual knowledge on structure of Social and Health Services.

Advantages - they are easy to score and save time, providing instructors with basic information about what has to be learnt and pinpoint general weakness.

Interviews

Students can be asked for views and encouraged to think about their own frame of reference. The technique allows for flexibility and generates

spontaneity.

Weaknesses - the possibility of developing unfavourable reactions between interviewer and interviewee. Interviewee may be disadvantaged because of note taking or recording devices which can prevent free response and communication.

Case studies

The learner must solve or handle the problem presented by choosing from a list of possible solutions or by writing the proposed solution to the problem, listing steps taken.

Project work

An in-depth study of student's own choice, related to course objectives, aimed at increasing student involvement in a specific area. There is a list of suggested project subjects in the Joint Board of Clinical Nursing Studies outline curriculum in Geriatric Nursing Course No. 296.

Projects test the learner's ability to:-

- acquire and use information
- develop problem solving ability
- keep up a sustained effort with supervision
- produce work of an acceptable standard

Rating scales

A technique which attempts to assess attitudes of groups. It may be a teacher-rating, an observer-rating or self-rating. None of these techniques can be used with much confidence for

precise assessment of an individual but a group of individuals can be assessed with relative accuracy, for example, the teacher may wish to assess the attitude to a particular learning task. A teacher-rating scale might look like this.

Directions

Make your rating on each of the following attitudes by placing an X anywhere along the line.



Looks bored
Does not get
work materials
out or prepare
to start

seems about
as eager as
the rest of
the group

Ready to
begin
appears
animated and
eager to
learn

Checklists

There are many forms and uses e.g. a detailed breakdown of the behavioural objectives for a specific task can form a useful evaluatory instrument for assessment of a student's performance of that task. These are clearly observable events which either occur or do not. Thus a carefully composed checklist can form a reliable basis for judging proficiency. Check lists may also be used by the learner to evaluate his/her own performance. A criterion referenced check list can provide a major source of constructive feedback for student assessment.

Self report

Students should be encouraged to take an active part in evaluating their own performance. This will involve them in identifying their own strengths and weaknesses and choosing their own learning objective (in addition to those already selected by the teacher). Some of these selected personal goals may be in the affective domain e.g. related to personal values or feelings of confidence. These are usually difficult to measure. For example a student may say he/she feels very anxious when having to talk to the mother of a sick child. After discussion of specific instances and an attempt to isolate specific causes, practice may be organised with peers in role plays or discussions. The student may then be asked to report back in an agreed specified time to discuss her levels of confidence and competence.

The value of this approach is that it encourages the students to take more responsibility for their own learning, to be self-directed in context. It encourages students to take a constructively critical approach to their own development - personal and professional. They will then be in a better position to appraise the behaviour and performance of others.

Course appraisal

It is essential to gain feedback from the course participants on the effectiveness of the course on points of:-

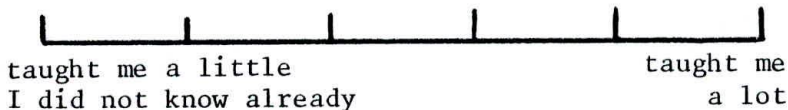
- relevance to their job
- usefulness of learning experiences provided
- suitability of learning aids

- length or enjoyment of sessions

A simple rating scale may be used. If some experimentation is taking place i.e. new course and new teaching methods being employed, a rating scale which is short and can be filled in at regular intervals throughout the course may provide more useful feedback to the course organiser than one long end of course evaluation questionnaire.

e.g.

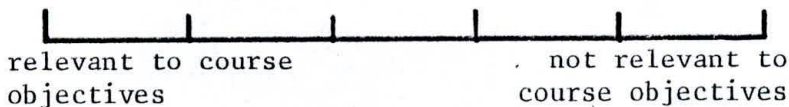
1. Amount of learning during session



2. Relevance to my work



3. As a learning experience



Examples of more complex course appraisal forms can be found in the Joint Board of Clinical Nursing Studies publication - Course Evaluation package on the design of tests you might wish to refer to.

Appendix B offers another approach for looking at curriculum in practice. (Pages 79-88)

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Suggested Action 8

Consider what assessment techniques you will use to help ascertain if learning objectives have been achieved.

Consider what strategies you will employ to evaluate design issues and implementation of the course you have planned.

This book has been designed to offer curriculum planners some practical ideas which will guide them in the design of a course. I am aware, however, of the danger of over simplifying some very complex issues, of trivializing concepts. I would urge readers to deepen their study of this very interesting subject.

Curriculum reform can be a very real instrument for change in an organisation. To be effective, however, we need planners with courage, conviction and a creative flair.

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A new kind of nurse - I

IN PLANNING any educational training programme, certain defined criteria will guide the decision-making process of the designers. Criteria which influence the nurse educator might be the needs of the service area, the knowledge needed by the nurse to perform her role safely and efficiently, and the constraints of the organisation.

This article examines some further points which add other dimensions (Figure 1) and could have profound effects on the teaching/learning scene. In some cases, this may require a rethinking of firmly held values and philosophies.

Factors affecting curriculum design include:

- The GNC document on educational policy, 1978-79, states that there should be a commitment by the training establishment to provide a "good climate for learning", and a "sequence of learning units which enables full integration of theory and practice".

- The nursing process requires that patient care should be considered systematically, that the patient should be seen as an individual in an emotional and social context and that planning will involve a problem-solving approach which encourages not only evaluation of one's actions, but self-examination of the reasons for decisions arrived at.

- In similar vein, the GNC statement on the profile of professional responsibility, which was drawn up in connection with nursing directives for the EEC, asked that the nurse should observe, assess and state a patient's needs, communicate with patients, relatives and colleagues, and critically assess and evaluate her own work and that of her colleagues.

- A search for the identity of nursing as a profession. A great deal of questioning is going on about what nurses do and why they do it. Nurses must supply the answers and learn to be accountable to those they work with and for.

- An increase in management tiers has led to the need to improve the nurse's management qualities. At different levels, she learns to become a decision maker.

- Society's expectations are changing. Most people now wish to be informed and consulted on decisions being made about themselves or their close relatives. The nurse must learn to be a communicator.

- A multidisciplinary approach to many health problems makes it neces-

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Tomorrow's approach to learning

Jean Heath, SRN, SCM, discusses the issues the curriculum builder has to consider and the shift to student-centred styles of learning for tomorrow's nurse.

sary for a nurse to be informed about wider issues. The nurse must learn to co-ordinate the work of other professionals, seeing the patient as the focal point of interprofessional expertise.

In the past, we have primarily asked the question: What do we want the student to *know*? But increasingly, in the light of the factors I have mentioned, we are having to consider a further question: What kind of a *person* do we want at the end of the training process?

In reply to this second question, I suggest we want a nurse:

- who is not only informed and skilful but who can apply her knowledge and skills in different medical, institutional, social and interpersonal situations;

- who is confident in her ability to plan and to implement those plans - that is, to think constructively and arrive at reasonable alternatives quickly;

- who is emotionally stable but flexible enough to give and take evaluation;

- who is secure in her professional self-identity and increasingly aware of the complex factors involved in the effective operation of team care;

- whose actions are comprehensive, logical and efficient in performing her role/function;

- who can see her patient as a whole person with background, relationships, value systems, etc, though these may not be obvious at the first meeting between nurse and patient.

In planning training courses, whether in further education or nursing, course

designers often appear to underestimate the importance of standing back and assessing those qualities they would like to see in the end product. Energies are all too quickly channelled into subject matter to be included, provision of experiences, organising timetables, with the emphasis on "covering" everything.

The central theme of this article is that the kind of nurse needed to implement the nursing process will necessitate great changes of thinking of attitude and practice in both teacher and learner. Much has been written recently on the nursing process, but it contains little comment on the implications for the schools of nursing. As an educational technologist, I would like to add to the general confusion or otherwise, by offering yet another viewpoint.

The GNC gave us a major clue when it suggested that consideration be given to providing the right climate for teaching and learning. This climate was not defined and one is left to interpret it or ignore it.

Tom Boydell discusses the establishment of a learning climate as "one of trust, mutual support, acceptance of the individual, warmth and respect". In such a climate, the learner can take risks (in the sense of trying out new behaviours), admit to difficulties and problems, give and receive feedback and cope with the allied stress.

The prime function of the teacher is to facilitate learning. No one would deny there are a great many facts to be

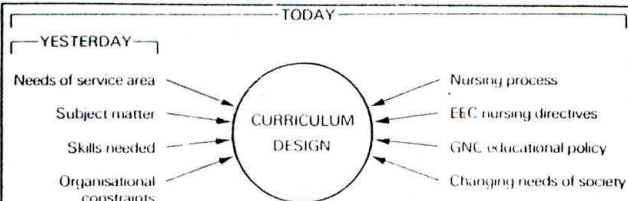


Figure 1: Factors affecting curriculum design

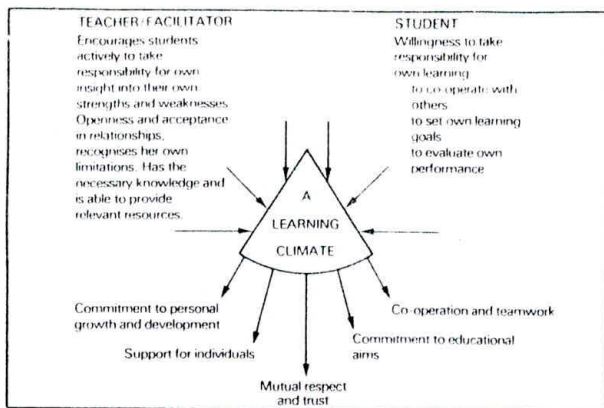


Figure 2: The learning climate.

learned, but how might they be learned? How can we arrange the learning experiences so that at the end of the process we have not only informed, but also confident, planning, decision-making, communicative nurses?

An exaggerated emphasis on teachers and teaching can have a detrimental effect on learners and learning. This is not a new thought. Cicero is quoted as saying: "The authority of those who teach can often hinder those who want to learn." Teachers might ask themselves if they have confidence in people's ability to learn and if they create conditions in which people are actively encouraged to learn.

Consider the following:

The elevated status of the teacher tends to devalue the status of the learner. The facade of the expert may be threatened by allowing the students to question, criticise or contradict.

The teacher's "expert", "high status" roles may tend to demotivate the learner. They reduce the learner's academic self-concept and undermine her confidence in what she may like to say. The lack of confidence which the learner has in her ability to produce "acceptable" knowledge tends to make her learning superficial - she tends to reproduce "appropriate" language, style and content.

Effective learning has to do with confidence as well as intelligence.

Teachers often seem to want to create dependence in the learner rather than autonomy.

The new role for the teacher which is being suggested here is that of a facilitator of learning. Such a facilitator would: provide an environment for students, in which there is mutual respect and support;

allow openness and acceptance in relationships;

encourage learners to gain insight into their own strengths and weaknesses;

be able to recognise and accept her own limitations;

involve the students actively to assume responsibility for their own learning;

have a base of knowledge and personal security from which to operate.

New role for the students

The student who would fit into this new learning climate is seen as a co-worker. She must take more responsibility for her own learning if she is to discriminate, make decisions, plan, etc. An open learning environment cannot become available unless and until the student meets the teacher with willingness to share the work.

Students of nursing tend to see their real training taking place primarily by the patient's bedside. If an integrated training programme is implemented, the student may begin to see the classroom also as a place where she may become better equipped to care for her patients, the place where she can explore some of the difficulties and traumas involved in this most complex of professions, the place where learning needs are shared.

Personal qualities and informational content are twin priorities when planning nursing curricula. An exploration of the implications of educational policy directives and current trends in thinking should guide the decision-making process. Training should provide opportunities for practising the interpersonal as well as the cognitive and psychomotor skills. Integration of theory and practice is a priority if the student is to link her practical experiences to her educational needs. The learning environment is the place where those needs are met.

I seem to be advocating a definite shift from traditional methods of teaching - that is, information giving, teacher-centred styles - to more progressive, permissive and student-centred styles. I am also aware that autocratic methods

usually take less time to reach meaningful levels of cognitive performance. However, when considering this wider view of teaching/learning - that is, of developing, acquiring and changing attitudes, values, standards, feelings and emotional control - then student-centred methods are found to be more effective (Gibbs and Durbridge, and Gage).

Much of the factual content of the curriculum can be taught by self-instructional methods, hence the interest in setting up resource centres in schools of nursing and the increase of sales of programmed texts produced by us at the NHS Learning Resources Unit. There has also been a great demand for information on the availability of all types of teaching media. These factors may be due to the information overload in the nursing syllabus. They could also point to the need to free the tutor for more seminar/tutorial or discussion-type sessions with her students.

Changes which have their roots within an organisation and have the backing and commitment of staff involved, are more likely to be brought about effectively (Taylor and Walton). Changes which are imposed from without may take much longer. Energies which could be employed in constructive planning may be dissipated in all sorts of resisting behaviours. Teaching staff will need time to develop new skills and priority must go to in-service training.

I do not believe this to be the outpouring of a naive Utopian theorist: some schools of nursing are already implementing integrated modular training schemes, in an attempt to provide a cohesive meaningful training for their students. Nor do I believe the environment which encourages student-directed study to be one where teachers are uninvolved or opt out. This approach calls for a deep commitment, a sharing of concern to meet the educational needs to tomorrow's nurses. □

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NEXT WEEK: Learning objectives and the nursing process.

"Would you tell me please which way I ought to go from here?"
 "That depends a great deal on where you want to get to," said the cat.
 "I don't much care where..." said Alice.
 "Then it doesn't matter which way you go," said the cat.
 "...so long as I get *somewhere*," Alice added as an explanation.
 "Oh! you're sure to do that," said the cat, "if you only walk long enough."

Lewis Carroll, *Alice in Wonderland*

NURSE educators today are facing the challenge of restructuring the curriculum to meet the EEC directives and the GNC educational policy recommendations. It is an appropriate time to reflect on where we are, and where we may like to go, in setting educational objectives for nursing.

All of us have objectives of one kind or another, serving as an underlying basis for our actions. Sometimes these are vague and undefined: "I must do something to liven up my social life"; at other times, we have quite specific things in mind: "I am going to lose 7lb before my summer holidays."

Milestones to achievement

Objectives can be our own, or they can be offered, and sometimes even imposed upon us, by someone else. Whatever their source, objectives can be viewed as markers or milestones on the way to the achievement of some effort, ambition or accomplishment.

The word objective in Roman times referred to a pillar which marked some turning point in a chariot race. With this in mind, an objective does not have to be seen as a final destination marking the termination of an activity. It can also refer to markers along the way, turning points or, as in the case of a microscope lens, a point marking a maximum concentration of energy (Davies).

Myths and misconceptions

The publication in 1956 of *The Taxonomy of Educational Objectives, Handbook 1, Cognitive Domain*, edited by Benjamin Bloom, stimulated interest in the identification, description, classification and measurement of educational goals. The original taxonomy was designed as a classification of student behaviours; the objectives listed, varying a great deal in their level of specificity, are expressed in terms of inferred mental processes.

Bloom's taxonomy, coupled with the programmed learning movement, led to a strong behavioural objectives movement employing specific highly detailed

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Objectives: Markers along the way



Sheila Marson

Sheila Marson, SRN, RSCN, SCM, RNT, examines learning objectives and the nursing process, pointing out that an objective should not be regarded as a final destination marking the end of an activity.

objectives, the emphasis lying on overt student performance – that is, what the student would be able to do as a result of instruction rather than on what the teacher did. "While this approach has many attractive features, the apparent simplicity can conceal some real hazards for the curriculum developer" (Hogben).

The hazards apart, however, the behavioural objectives movement has led to improved practices in education and training. The attention of teachers, educational developers and designers was drawn to the fact that many courses and units of instruction had been planned, implemented and evaluated, without the benefit of stated goals. Where goals had been stated, they were often too vague or too broad to give real guidance or direction.

It may be useful here to look at the features of a behaviourally stated objective: what it should contain and what should be avoided.

Characteristics and classification

Some champions of the behavioural objectives approach have described the following objectives:

"An objective is an intent communicated by a statement of what the learner is to be like when he has successfully completed a learning experience. It is a description of a pattern of behaviour (performance) we want the learner to be able to demonstrate" (Mager).

"A statement of an objective is useful to the extent that it specifies what the learner must be able to do or perform when he is demonstrating his mastery of the objective" (Mager).

"A satisfactory instructional objective must describe an observable behaviour of the learner or a product which is a consequence of learner behaviour" (Popham).

"In addition to the content on which learner behaviour is to be performed, a useful instructional objective must state both the intended observable learner behaviour which will result from instruction and the relevant conditions under which it will be performed" (Sullivan).

"Behavioural objectives are statements which describe what students will be able to do after completing a prescribed unit of instruction" (Kibler).

An examination of these statements identifies some of the main features of behavioural objectives. First, the focus lies squarely on the *learner*, not the teacher. Second, the importance of stating objectives in terms of what the learner will be able to *do* is stressed. Other considerations emphasised by Mager include the conditions under which the behaviour will be observed and the standards to be achieved.

A typical example offered by Mager reads: "Given a human skeleton, the student must be able to correctly identify by labelling at least 40 of the following bones; there will be no penalty for guessing" (list of bones included).

Highly specific statements of this kind abound in the literature on behavioural objectives.

Not all the proponents of behavioural objectives insist on such detail, however. Other workers suggest rather more generalised statements of differing levels of specificity, according to the nature of the learning task and demands of the subject matter; in other words, it all depends.

Krathwohl suggests we need objectives at three levels of specificity.

Level 1: general statements of intent serving as useful guidelines for planning a course.

Level 2: behavioural objectives derived from Level 1 statements to use as curricular building blocks.

Level 3: specific behavioural objectives for the creation of instructional materials and experiences.

These three levels can be illustrated by taking an example from the Joint Board of Clinical Nursing Studies' *Outline Curriculum in the Nursing of Venereal Diseases*.

Level 1: at the end of the course, the nurse will be skilled in diagnostic techniques.

Level 2: the nurse will be skilled in the use and management of the microscope and have knowledge of microscopy techniques.

Level 3: at the end of the unit of instruction, the student will be able to: (a) define the principle by which an optical

microscope works, identify correctly the working parts and give a brief description of the function of each part; (b) complete a simple diagram to show the passage of light rays through the microscope and the effect of mirror, condenser slide, immersion oil, objective and eyepiece on the path of light rays; (c) focus a microscope so that the image can be clearly seen without damage to slide or objective.

Uses and abuses

The main argument in support of behavioural objectives is that they provide a target for teaching and learning and a measure of its success. In other words, they give clearly defined goals for both student and teacher to work towards, and enable the quality and effectiveness of instruction to be assessed. Another argument in their favour is that the removal of ambiguities from the learning task allows for a more rational approach to the selection of an appropriate teach-

There are pitfalls along the behavioural objectives road. Too much attention to the behavioural aspects can result in trivial and irrelevant or, at their worst, worthless objectives. Some of the most worthwhile behaviours we require of our students are the most difficult to describe

ing method or media. In other words, when we know exactly where we are going we are in a better position to select the most direct route and an appropriate means of travel.

As suggested in the first paragraph, however, there are pitfalls along the behavioural objectives road. Too much attention to the behavioural aspects can result in trivial and irrelevant or, at their worst, worthless objectives. Some of the most worthwhile behaviours we require of our students are the most difficult to describe.

A rose by any other name

Another more practical issue experienced by teachers is that the writing of relevant, worthwhile objectives is a very time-consuming and mentally exhausting exercise, leading many to wonder if the outcome is worth all the effort. Some even feel that to specify objectives interferes with freedom and creativity in teaching and learning.

The idea of objectives in nurse education is not a new one: in fact, good

teachers throughout the years have been using objectives. I have a vivid recollection of a nursing school staff meeting early in my nurse teaching career: the meeting was called to plan a forth coming study block. Discussion centred on the merits and demerits of various lecturers, films and methods of teaching, until one experienced teacher, on the point of retiring, drew us up sharply with the comment: "We are discussing everything but what the students will be able to do at the end of the block."

Now, many years on, the idea of behavioural objectives is no longer a novel one. Trainee nurse teachers are familiar with, if not experienced in, the writing of behavioural objectives for the instruction or experience they are planning for the learner.

In my experience, however, objectives specified for nurse education lie at either end of the extremes. That is, they are either too generalised to be put into operation easily or they lie at the lowest level of Bloom's taxonomy, being concerned with the recall of factual knowledge rather than the higher order mental processes of analysis, synthesis and problem-solving. Perhaps the next step is to be able to write and use meaningful behavioural objectives of a higher order in the affective and psychomotor as well as the cognitive domain, to avoid concentrating on one domain to the exclusion of the other.

A resumé of Bloom

It has been said that Bloom's taxonomy is the most quoted but the least used of books in education. If the nurse teacher can brace herself to peruse more than the introductory chapters, there is much to be gained.

Cognitive domain

Bloom's taxonomy of the cognitive domain deals with knowledge and understanding. It is concerned with processes within the student's mind involving the recall of facts, concepts and principles and the application of these to the solving of a problem.

Bloom describes six levels of cognitive behaviour which can be arranged in a hierarchical sequence. These are: knowledge, comprehension, application, analysis, synthesis and evaluation.

For many years, the teaching of nursing has been at the lowest level of Bloom's taxonomy. The role of the nurse teacher was to "give them the facts", the student's role to memorise and regurgitate these. This was called learning. We now realise that students can learn facts on their own.

The nurse teacher's role has developed from an imparter of facts to a facilitator of learning, a guide and counsel-

for. It is important, one may even say essential, therefore, to write objectives that involve higher order mental processes than those of the memorisation and recall of facts, if the nursing process is to be implemented fully.

Affective domain

Behaviours in the affective domain are those which relate to the students' feelings, beliefs, attitudes and value systems. While few challenge the concept of behavioural objectives in the cognitive domain, there is less agreement among teachers on the relevancy of setting objectives in the affective domain. Some may indeed challenge the right of teachers to concern themselves with a student's attitudes and value systems, equating it with the teaching of moral dogma.

In nurse education, teaching in the affective domain could be seen as helping the trainee determine options and develop guidelines for selecting from alternative courses of action those which will ultimately enrich her relationship with patients and colleagues.

If we accept this as a desirable aim, it is essential that affective behaviours for a particular nursing situation be identified, analysed and operationalised into a learning situation for the student. The planning of learning experiences to realise affective behavioural objectives is a very difficult task, however, and one which has yet to be tackled effectively in nurse education. *The Taxonomy of Educational Objectives, Handbook 1, Affective Domain* (Krathwohl, Bloom, Masia) describes the various levels of affective behaviours and gives examples of behavioural objectives for each, many of which can be applied in nurse education.

Psychomotor domain

The psychomotor domain can be defined as "those behaviours which include muscular action and require neuromuscular co-ordination". Practical nursing skills do not lie wholly in the one domain; usually all three are involved. Performing a practical skill such as giving an intramuscular injection involves cognitive, affective and psychomotor behaviours. Learning psychomotor skills is an egocentric process which absorbs the learner's attention until the final stages of learning are reached and the skill becomes an automatic response.

It is important for nurse teachers to focus on only the psychomotor aspects of the skill until this final stage is reached; thereafter, the skill can be viewed in its relation to the total phenomena of nursing care. How would the learner driver react if, the first time he took the car onto a main road, the instructor asked him what the functions of the gears were? The taxonomy for the psychomotor domain of learning has not

been developed as fully as that in the cognitive domain.

Dorothy Reilly suggests Davies' taxonomy of psychomotor behaviours is the most applicable to nursing, and gives helpful examples.

The three domains

Although the three domains have been isolated to demonstrate their individual characteristics, it must be remembered that human behaviour is a holistic process. All three types of behaviour need to be integrated in a compatible and complementary manner to form relevant learning experiences. There has been a tendency over the past few years, arising out of the knowledge explosion, to overemphasise the cognitive aspects of nursing. Learning experiences should be planned to ensure all three domains receive appropriate emphasis. The tax

‘The behavioural objectives movement has led to improved practices in education and training. The attention of teachers, educational developers and designers was drawn to the fact that many courses and units of instruction had been planned, implemented and evaluated, without the benefit of stated goals’

onomies, therefore, give a guide to the selection of meaningful experiences and suitable evaluation procedures.

Learning to use the process

Jean Heath suggested last week that to produce "the kind of nurse needed to implement the nursing process will necessitate changes of thinking in both teacher and learner". I suggest we need to go back and take a critical look at "behavioural objectives".

Some of the arguments raised against them need to be reconsidered – notably the arguments that: (1) they stifle the creative process by interfering with the freedom to teach and learn; (2) the need for precision in their specification is completely at odds with the complexity of nursing; (3) the time and effort spent in developing objectives is not justified by their effect on the final outcome of a nurse training programme.

To take the first argument, behavioural objectives can be instrumental in providing a framework within which relevant learning experiences and evaluation methods can be developed. Structure, if

relevant and flexible, does not stifle freedom but rather enhances it. Note the chaos that results when structure is withdrawn from society by strike action. A stated destination does not mean that all learners and teachers must follow the same route but, rather, the route most appropriate for them.

In response to the second argument, it is important to remember that alternative approaches to the development of behavioural objectives do exist. The approach developed by Mager is relevant to the development of programmed instruction or to lower levels of cognitive behaviour but inappropriate to developing the higher level cognitive and affective behaviours inherent in applying the nursing process. Perhaps what we need is a taxonomy of behavioural objectives for the nursing process.

The third argument against specifying behavioural objectives, that it is "too time consuming" is invalidated in my mind. I see the introduction of the nursing process as providing an opportunity for all those involved in training and educating nurses to get together to explore their own knowledge, experience, values and beliefs about nursing, teaching and the society in which we live. Behavioural objectives arising out of these explorations will provide the necessary structure on which to build a relevant and effective nursing curriculum for the future. □

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NEXT WEEK: It's a taxing process.

It's a taxing process

Jean Heath, SRN, SCM, and Sheila Marson, SRN, RSCN, SCM, RNT, continue the series with a discussion of the educational implications of the nursing process philosophy.

MUCH of the first article in this series (*NM*, August 9) centred on learning: the learning climate, learning to communicate, and encouraging nurses to take responsibility for their own learning.

When we talk about learning, we are using the same term to describe a wide range of different outcomes and processes. We talk about "learning the six times table", "learning to tie shoelaces" and "learning to live again" after a physical or psychological disaster.

It will be clear from this that although each of these involves learning, the processes and outcomes are very different.

What is learning?

Learning has been defined (Gagne) as a "change in human disposition or capability which can be retained and which is not simply ascribable to the process of growth".

Gagne goes on to say: "The kind of change called learning then exhibits itself as a change in behaviour, and the inference that learning has taken place is made by comparing what behaviour was possible before the individual was placed in a 'learning' situation, and what behaviour can be demonstrated after the event. The change may be an increased capability to perform some kind of skill, cognitive (mental), psychomotor (practical) or social, or a change in affect - i.e. disposition, attitude, interest or value system. The change must be of more

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Sheila Marson (left) and Jean Heath in the Unit library.

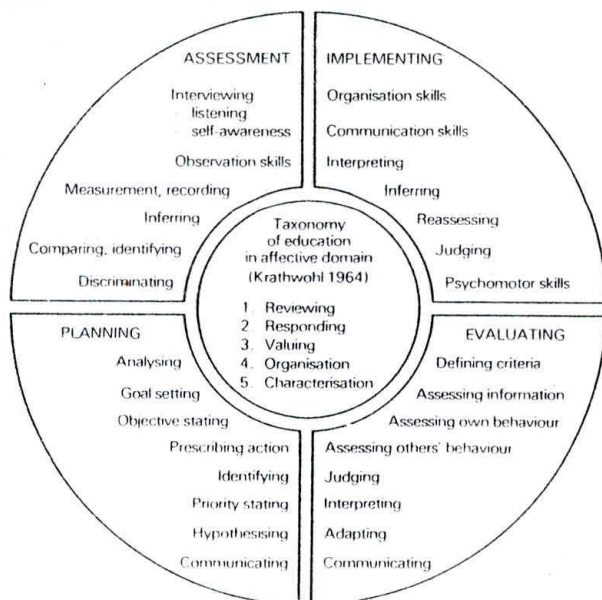


Figure 1. Nursing skills in the nursing process

than momentary permanence – ie, it must be capable of being retained over some period of time. It must also be distinguishable from the kind of change attributable to physical growth.

What is teaching?

If the aim of teaching is the achievement of some specific end state, what then is teaching? It has been argued (Hirst) that there is no such thing as teaching without the intention to bring about learning. Teaching, therefore, is the label applied to those activities of a person A (the teacher), the intention of which is to bring about in another person B (the learner) the achievement of an end state X (ie, learning). These activities can include designing a curriculum, engaging in didactic teaching, and carrying out activities of the non-directive variety currently in vogue.

Means and ends

It would seem that what we should be more concerned with is ends rather than means. Once ends are defined, the means of achieving them can be tailored to the personalities of individual learners and teachers and the organisational ambience. With the more traditional task centred approach to nursing, it was relatively easy to define objectives (ie, ends).

When one looks at more complex activities such as those involved in learning to implement and, what is perhaps more important, to internalise the values of the nursing process approach, ends are not so clear cut. Until the nettle is grasped by both nurse teachers and clinicians alike – that is, until we can define appropriate and relevant learning objectives for both clinical experience and classroom – the selection of effective learning experiences and appropriate evaluation tools will be akin to a shot in the dark. We can argue the merits of autonomous versus directive learning systems, block versus modular systems, *ad infinitum*. These arguments may be irrelevant until it has been decided what it is we want to achieve.

The quality of nursing care

In the first article in this series, it was suggested that a consideration of the qualities of the nurse was as important as her knowledge and skills achievement. Last week, in part two, it was suggested that a taxonomy of objectives might be devised around the nursing process – a taxonomy which would take into account the affective domain of nursing behaviours (that is, those concerning feelings, beliefs and values).

To facilitate this, we offer an example of a nursing process taxonomy. The four components of the process (McFarlane) are presented in terms of nursing skills (Figure 1). The hierarchy of affective be-

haviours is shown in the centre. This we see as a central issue if nurses are to embrace the philosophy of the nursing process and not pay lip service to the machinery of it.

In the four tables in this article, we give an example of how objectives relating to steps in the nursing process will suggest learning experiences and help to focus on the appropriate evaluation technique.

The objectives stated are very broad and should provide general guidelines.

Teachers in classroom or ward may wish to be more specific in certain areas – for example, in the learning or practice of certain nursing procedures.

We have also assumed that the students' learning will be integrated and that the classroom will offer a continuation and relevant theoretical back up to the learning experience on the ward.

Implications of implementation

The examples we have given in this article represent our view as educational

- Are learning objectives specified for the experience available on the ward or department?
- Do the objectives state what the learner will be able to do and the standard to be achieved rather than experience available?
- Do the objectives reflect the nursing process approach?
- What account has been taken of learners' previous experience when planning objectives for ward experience?
- What measures are taken to determine learners' skills and abilities at the beginning of their span of service on the ward?
- What measures are to be taken to determine whether learners have achieved objectives specified at end of ward experience?
- Are learners given sufficient and frequent information on their progress?
- How committed are other trained members of the ward team to supporting and encouraging learners?
- How is the commitment to supporting and encouraging learners expressed?
- Do any members of the team have special abilities or qualities which can be utilised to the learners' advantage?
- How far are trainees encouraged to give their own ideas, criticisms and suggestions about nursing care?
- Are they involved in decision-making, problem-solving and planning of nursing care?
- How are trainees helped to develop their communication skills; are there any problems specific to this experience?
- Does the ward ambience emphasise total patient care?
- Are interpersonal relationships between learners and trained staff open enough to allow deep positive and negative feelings to be expressed?
- What learning materials (eg, books, charts, models, tape slides) are available on the ward/department?
- Are the materials up to date and at a suitable level for learners?
- Are they easily accessible to learners?
- Is there anything else that could be obtained/prepared to help learners?

Figure 3: Questions to ask service staff.

- Are objectives clearly defined for each unit of learning?
- Do the objectives meet the learners', rather than the tutors', needs?
- How far have learners been involved in identifying learning needs and objectives?
- Do objectives specified reflect the nursing process rather than the medical model?
- Are the objectives operational (ie, defined in such a way that their achievement can be clearly demonstrated)?
- Do the learning experiences planned relate to the course objectives?
- Are the evaluatory tools appropriate for each learning experience (ie, are they valid and reliable)?
- Are learners encouraged to carry out self- and/or peer evaluation?
- How prepared are teachers to allow learners to evaluate their teaching practices?
- Do relationships between teachers and learners encourage open communication?
- Are learners helped to learn to work effectively with others on problem-solving activities?
- Are ideas, criticisms and suggestions invited from learners?
- Are learners involved in decision-making?
- What resource materials are available for learners' use?
- How well is this integrated into the curriculum?
- Are the materials easily accessible?

Figure 4: Questions to ask tutorial staff.

technologists on the problem of incorporating new ideas – such as the GNC educational policy and the EEC directives – into a traditional framework of training. The system we have used should not be seen as fixed and rigid but rather as a dynamic and continually evolving process where one is continually reviewing ends and adjusting means. Whatever conceptual framework is used as a base for curriculum development, it should reflect a total view of the

patient as an individual, as expressed in the nursing process.

No matter how carefully a curriculum is planned, its success will depend on the way it is implemented. A commitment will be needed on the part of service and teaching staff to its underlying philosophy. We conclude by suggesting a basic framework (Figures 3 and 4) of questions to ask, for those wishing to implement a curriculum based on the nursing process □

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Figure 2: A framework for classifying objectives in the affective domain (from *Taxonomy of Educational objectives*, Krathwohl, Bloom and Masia).

1.0 Receiving (attending) 1.1 Awareness 1.2 Willingness to receive 1.3 Controlled or selected attention		the learner is aware of the existence of a certain stimulus, attends to it and becomes willing to receive it ... attends when others speak ... increase in sensitivity to human need ... alertness toward human values	
2.0 Responding 2.1 Acquiescence in responding 2.2 Willingness to respond 2.3 Satisfaction in response		the learner is committing himself in some degree to the phenomena involved – becomes interested in ... willingness to comply with health regulations ... finds pleasure in reading	
3.0 Valuing 3.1 Acceptance of a value 3.2 Preference for a value 3.3 Commitment (conviction)		implies the learner's commitment to the behaviour which is guided by the value ... assumes responsibility for actively participates in ...	
4.0 Organisation 4.1 Conceptualisation of a value 4.2 Organisation of a value system		as new values are internalised, these are gradually organised into a system ... forms judgments about develops a plan for ...	
5.0 Characterisation by a value or value complex 5.1 Generalised set 5.2 Characterisation		the individual acts consistently in accordance with the values he has internalised ... develops a code of behaviour ... judges terms or issues in a situation in accordance with ordered value system rather than "emotional wishful thinking" or fixed dogmatic precepts	
Steps in nursing process	Objectives	Learning experience	Evaluation techniques
1. ASSESSMENT Information gathering about an individual patient. Data collecting and recording Interviewing patients Observation of patient Reading and interpreting records — Analysis of information gathered — relevant/irrelevant — normal/abnormal — Identifying problem actual potential — Identifying strengths actual potential — Priority setting	The nurse learner ... identifies factors in the patient's environment which influence his ability to adapt to the limitation imposed by his illness ... develops an awareness of the importance of maintaining effective relationships with her patients ... expresses an awareness of the need to involve the patient and his family in developing a plan of care ... listens to the patient express his concerns ... deduces relevancies and inter-relationships of information gained on assessment ... interprets information in terms of scientific theory concepts and principles ... identifies significant relationships among information gained	Ward The learner carries out assessment of patient according to individual ward requirements Discussion with sister/nurse in charge re findings, difficulties, possible omissions — is encouraged to identify all possible sources of information — is encouraged to discuss any communication problems with child or relative and explore own reactions to those difficulties Classroom Sociological aspects — child in society — child in the family Child development Common medical conditions Common surgical conditions and their treatment Common congenital abnormalities and their correction Observation skills Recording skills Communication skills training — relationships with colleagues in care team — effective listening — effective communication — the role and the person — attitudes, values and assumptions	Ward Nurse audit/criteria checklist, eg student encourages patient to express concerns about impending surgery Criteria for evaluation — identification of patient verbal and non-verbal cues — relevance of implications for nursing actions to cues exhibited in the communications Observations of student in care planning meetings Classroom Written work Discussions and interviews Role play Interview tape playback on video or audio cassette.

<p>2. PLANNING nursing care</p> <p>Setting objectives</p> <ul style="list-style-type: none"> short-term long-term <p>Determining alternative nursing actions and their consequences</p> <p>Selecting appropriate action</p> <p>Setting priorities of action decided upon</p> <p>Formation of care plan (with team if appropriate)</p>	<p>The nurse learner</p> <ul style="list-style-type: none"> contrasts the needs of a patient in a temporary acute illness with those of a patient with a progressive illness assumes responsibility for involving patients and their families in decisions of care that affect their lives predicts the consequences of certain nursing actions from the information collected makes judgments regarding various approaches to nursing care selects nursing measures calculated to be most effective in meeting nursing objectives communicates plan of care to others in the care team 	<p>Ward</p> <p>Learner is encouraged to participate actively in the formulation of paediatric care plans</p> <p>Classroom</p> <ul style="list-style-type: none"> Identification of the needs of a child linked to activities of daily living (Roper, N.) Identification of the needs of mother or other significant relatives of a paediatric patient Practice in planning for care from given assessment forms Discussions with tutor and peers about <ul style="list-style-type: none"> possible approaches to care implications/outcomes for different approaches problem stating priority setting 	<p>Ward</p> <p>Observation of learner during planning session</p> <ul style="list-style-type: none"> relevant contribution ability to see priority ability to state possible outcomes of care planned <p>Classroom</p> <ul style="list-style-type: none"> Written care plans discussions with tutor and peers Problem solving exercises Simulation games
<p>3. IMPLEMENTATION</p> <p>Preparation</p> <ul style="list-style-type: none"> self environment patient <p>Action</p> <ul style="list-style-type: none"> inform teach/support/counsel/refer provide care comfort measures maintenance diagnostic prevention <p>Record and report</p>	<p>The nurse learner</p> <ul style="list-style-type: none"> demonstrates her ability to maintain good inter-personal relations with her patient in providing care values and protects the patient's right to privacy performs technical skills competently and safely works with patient and others to provide continuity of care records significant information accurately instructs the patient and his family in relation to identified learning needs 	<p>Ward</p> <p>The learner is encouraged to participate in carrying out nursing care plans (according to level of experience), recording and reporting procedures</p> <p>Classroom</p> <p>Demonstration and practice of various skills necessary for the safe practice of nursing care</p> <p>Communication skills training in relation to interpretation of patient's verbal and non-verbal cues during nursing procedures discussion/roleplay</p>	<p>Ward</p> <p>Criteria check lists for observers – <i>eg student explains a procedure to a child</i></p> <ul style="list-style-type: none"> explanation precedes procedure explanation is in language the child can understand explanation is accurate the child is encouraged to ask questions and express concern questions are answered accurately and sensitively <p>Classroom</p> <p>Critical incident technique – a critical incident is one which "makes a significant difference in the outcome of an activity" (Fivars and Gaswell) – <i>eg student explains a procedure to a child</i></p> <ol style="list-style-type: none"> Identify <ol style="list-style-type: none"> learner behaviours which assisted the child to understand and accept explanations given learner behaviours which interfered with effectiveness of the communication rating
<p>4. EVALUATION</p> <p>a. Evaluate outcomes of nursing action taken</p> <ul style="list-style-type: none"> collect information related to nursing objectives set – record compare this information with expected results judge the degree to which these objectives have been met <p>b. Evaluation of the steps of the process. Use the information gained to evaluate the steps of the nursing process to determine further action – <i>eg: how good is the system of data collection? Does the nursing history allow information to be collected on physical, psychological and social aspects of need? are patient problems and goals clearly stated? does the plan of care identify nursing action to be taken, frequency and who is responsible? is there an effective evaluatory system?</i></p> <p>Modify plans as necessary</p> <p>Report/record</p>	<p>The nurse learner</p> <ul style="list-style-type: none"> validates her own behaviour in relation to her nursing objectives for a particular group of patients provides rationale for various outcomes uses defined criteria to measure the results of care given is able to discuss and assess each step of the nursing process in relation to care given adapts or modifies plan and behaviour as indicated in the evaluation 	<p>Ward</p> <p>The learner participates in evaluating care given</p> <p>Reviews and evaluates the nursing process in relation to the total care of a patient or group of patients</p> <p>Classroom</p> <p>Interpretation and evaluation of patient observations and recordings</p> <p>Criteria for judging the results of different nursing action</p> <p>Reviewing and evaluating steps of the nursing process</p> <p>Nursing care studies – a problem-solving activity where students can evaluate the steps of the process related to individual patient</p>	<p>Ward</p> <p>Ability to adapt care plan as a result of evaluation findings, in consultation if necessary</p> <p>Recordings of evaluation findings and reasons for non-attainment of set objectives</p> <p>Classroom</p> <p>Nurses notes on care plan evaluated to assess learner practice competency</p> <p>In discussion, learner able to explore critically own behaviours at different points in the process</p> <p>Learner able to verbalise about her own learning – cognitive, psychomotor or affective, and give examples</p>

Appendix B

INTENTION AND PRACTICE IN NURSING EDUCATION

A way of looking at the relationship between the stated aims and objectives of a nursing curriculum and how the teacher implements these in practice.

Tutors in schools of nursing throughout the country have, over the last few years, been involved with curriculum reform. Many working groups have been set up to re-design nursing programmes in order to reflect a nursing model which focuses more on the needs of the individual than on symptoms, diseases and treatments, which presents a holistic view of people and their needs rather than a fragmented topic approach. There has also been a shift in climate in the classroom from a 'teacher-centred' approach to one which is more participative and activity-based. But . . . has there been as much change as you anticipated or planned for?

It might now be an appropriate time to review the work done and attempt to assess how the intentions of the curriculum design relate to the implementation of that design in practice.

One method for examining the curriculum in this way is to draw up a profile (F.E.C.R.D.U. publication 1980, from which this article has been adapted) which will reflect its main characteristics and relate these to the kinds of learning activity which take place in the classroom. When writing aims, objectives and planning strategies for learning it was necessary to distinguish between items which were primarily to do with knowing, to do with doing and to do with feeling.

We may also be concerned with *product skills*, i.e. concerned to inform students about i.e. giving information and facts, and *process skills* i.e.

helping students to learn how to inform themselves, a concern with continuing development. The contents of a product or process-centred course may be similar - the aims will be different and the methods will be different. A process approach is not necessarily superior to a product approach. There are many facts and basic competencies which are necessary to the mastery of most skills, and in some situations where resources are limited it may be more appropriate to take a product approach.

The qualified nurse hopefully exhibits a wide range of knowledge, skills and attributes, and the course of study which enables her to practice should reflect a broad balance of approaches. There can, however, be a miss-match between our intentions when planning and what happens in practice. In order to look at this in some detail it is necessary to consider the different approaches to teaching and learning which may have been adopted and it may also be of interest to think about the possible advantages and disadvantages of each approach.

1. *A competency based approach* - the accent is on the competent performer and the aims are derived from the skilled nurse in the clinical situation.

The risks involved in this approach may be that:-

- being able to perform a skill does not necessarily ensure understanding
- many items may be labelled simply as skills which are much more complex
- the student will not be able to transfer knowledge easily

- skill requirements change and need regular updating.

The possible advantages are that:-

- it may be attractive to course participants
- there is possibility of quick results and success
- personal development and confidence can follow acquisition of demonstrable skills
- relevance is easily demonstrated
- in theory - is easy to assess both by learners and tutors
- an active job related approach suits most learners.

3. *An information based approach* - this assumes that 'knowing about' and 'knowing what' is sufficient for nursing development. The aims of this approach are derived from a situational analysis of the service needs and the academic subjects involved.

The possible risks attached to this may be:-

- that knowledge may be accrued to enable the student to pass an exam and be of temporary significance
- that the students will be given a narrow view of learning and their role in it.

The possible advantages are that:-

- the content to be taught is easily available.
- this method is well established
- a factual background is essential for most kinds of learning
- it is relatively easy to test the learner's knowledge.

3. *A socialization approach.* This approach is concerned with the development of specified attitudes, values and attributes. Its aims are derived from assumed requirements of the working environment, from the members of the care team, from patients and their relatives and friends. It is concerned with the development of responsible attitudes to their work, to the development of initiative, co-operation and reliability.

Risks:-

- results may be difficult to measure
- the student's peer group may have more influence on adopted attitudes than the teacher.

Potential advantages:-

- the student is often described in terms of attitudes in both classroom and ward e.g. well motivated, shows initiative, a willing worker, cheerful disposition or sullen, unco-operative

- this approach recognises the importance of the 'affective dimension'
- if schools of nursing are to prepare nurses to work in a team, to value the needs of their patients, to co-operate, communicate and co-ordinate, then there is a case for considering this approach.

These three approaches tend to be product orientated, whilst the following three may be labelled 'process'.

4. *An experiential approach.* The aims here are also derived from a situational analysis but the concern is directed to the future needs and activities of the learner. The main characteristics of this approach are open-ended learner activities rather than clearly defined objectives. The learner is encouraged to make his own individual response to a learning experience.

The risks of this may be that:-

- the activities, being unstructured, may omit some desirable objectives
- the learner may wish to have more supportive direction from the tutor
- learning is difficult to assess.

The potential advantages are that the students:-

- have an opportunity to work on their strengths and develop their potential as individuals
- may become more involved and motivated as it is unlike traditional classroom learning.

5. *A reflective approach.* The general aims of this approach are to encourage the student to go beyond the information given, to develop abilities which will enable him to adapt to change, to 'transfer' knowledge in different situations, to make relationships and to develop frameworks for dealing with novel situations. These aims may be derived from the work situation - of what appears to 'work' in given situations, from logical problem solving frameworks e.g. nursing process, from research findings and from educational principles.

The risks which may be involved in this approach are:-

- the students and teachers may feel uncomfortable with their unconventional roles associated with this type of approach
- it may be difficult in the short term to demonstrate relevance to students
- unrealistic demands may be made on students to think and communicate at an abstract level
- it may neglect the area of 'feelings', 'emotions' and psychomotor skills
- activities can be teacher dominated and ignore individual student needs.

Potential advantages

- a critical understanding of concepts is encouraged
- skills gained are ongoing and useful in both personal and professional life

- gives status to group and individual experiences and hopefully improves learner's self concept.

6. *A counselling approach.* This approach encourages reflection on a personal level and between people and groups. Its aims are to:-

develop the individuals:-

- understanding and control of his or her own behaviour
- understanding of and interest in the feelings of others
- ability to distinguish between emotional and cognitive elements in an interaction.

The possible risks associated with this approach are:-

- it may appear intrusive to some students by asking for their involvement at a personal level
- it may demand sophisticated communication skills which some learners may have difficulty with
- it can descend into mere 'chat'
- results may be difficult to measure
- the group may become 'exclusive' and inward looking.

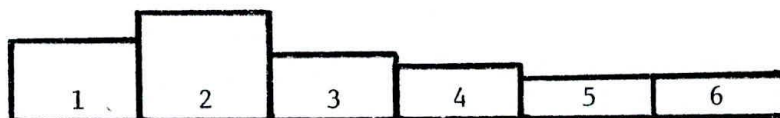
The potential advantages

- the climate for learning enables students to express feelings

- motivation can be improved when working with the students' interest and experiences
- the student is helped to sort out his own learning needs and hopefully will be committed to the achievement of objectives set
- the student is encouraged to be sensitive to needs, attitudes and reactions of others.

These six approaches or models serve to analyse the complex ways you may have planned and implemented your course. It is most unlikely that any one plan would be purely 'information giving' or 'reflective' in character, but a course plan may suggest certain leanings or tendencies to one or other of the approaches suggested.

A profile can be drawn of your course using these models as measuring tools.



- | | |
|------------------|----------------------|
| 1. Competency | 2. Information based |
| 3. Socialization | 4. Experiential |
| 5. Reflective | 6. Counselling |

The heights of the individual models in the profile reflecting the main characteristics of your course

In order to draw a profile of your course, it is necessary to have a copy of the aims and objectives, a detailed timetable and the tutor or tutors who have been involved with the students.

You will need to know - what the students are learning
- how they are learning
- why they are learning and
- how much time is spent on it.

First profile your intentions - using the written aims and objectives for the course, discuss with the tutor, who will be responsible for each session on the timetable, what emphasis he intends to give to which objectives, what learning strategies he might use related to the needs of that particular group of learners. Then try to decide which of the approaches listed best 'fits' your intentions. It is likely that in any one session more than one approach will be used, but it may be possible to estimate roughly. For example, you may estimate that in Session 1 on Monday morning you will put down one point for Information based, whilst on Session 4 on Thursday afternoon you may decide the weighting might be

.5 - Competency
.25 - Experiential
.25 - Counselling . . . and so on.

The numbers of references to each model is added up and a profile drawn. This might be done at the beginning of a block or the beginning of a week.

After a block or week is over go through the exercise again with the timetable and the group of tutors, deciding what actually took place. Draw another profile and compare with the first.

The relationship between intention and practice will be revealed in the lack of congruence between the profiles.

This way of looking at a course may also be applied to a single teaching session and at a personal level. It is a very useful exercise to consider what we are doing in this way, whether or not we draw up actual profiles. Whether or not you use this method to consider the design and implementation of courses, the process of discussing these approaches in curriculum planning groups would, I feel, be a very productive exercise.

This has been adapted from the work done by the study group which produced the document

"Developing Social and Life Skills"*

Strategies for tutors (January 1980)

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This article has been submitted to Nurse Education Today for consideration re publication.

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