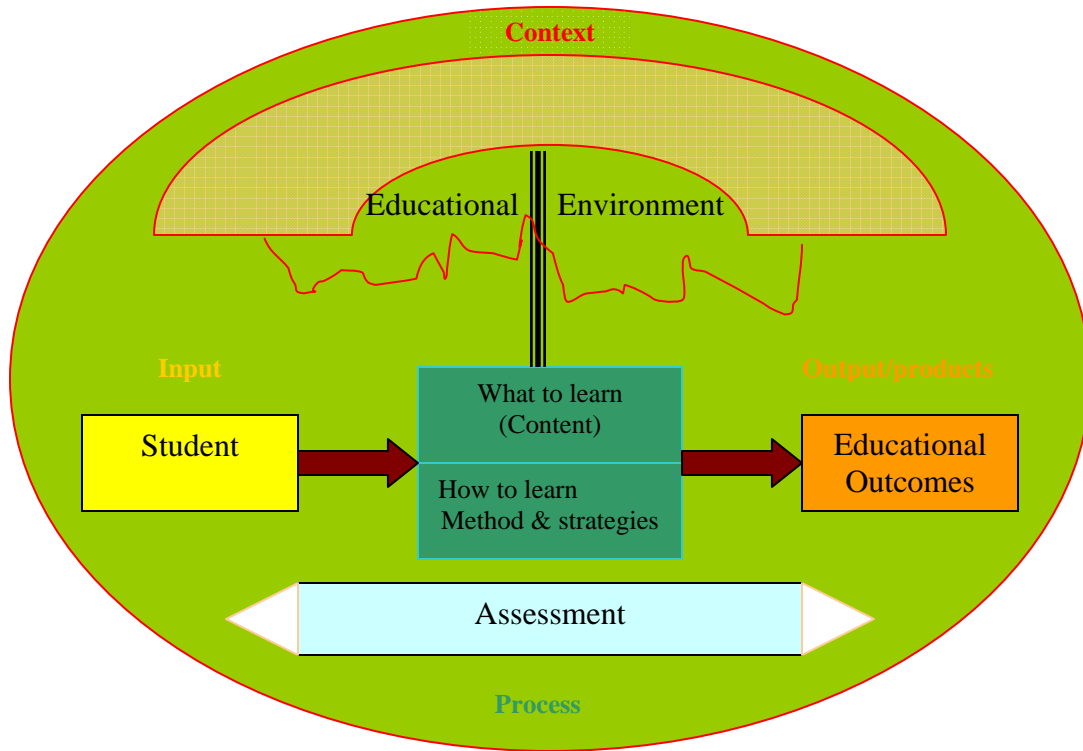


STEPS IN CURRICULUM DEVELOPMENT



1. Curriculum development is a process

- The process involves
 - Review and research
 - Reviewing the existing standards
 - Researching and investigating new trends
 - Analyzing the current program
 - Making recommendations for change or new curriculum
 - Revise and rewrite
 - Revising the written curriculum to reflect the standards
 - Choosing new materials (if needed)
 - Recommending and implementing initial staff development programs

- Development of an appropriate budget
- Pilot or implement
 - A group is selected to pilot the curriculum
 - Provided with adequate training
 - This group should developed appropriate assessment tool for evaluating the effectiveness and work through potential problems before full implementation
- Implement
 - Full implementation of the curriculum based on the feedback of the pilot group
 - Continued monitoring for effectiveness of the program
 - Collecting evaluative data marks this time
 - Assessment tools are more refined
- Evaluate/ monitor/ improve
 - Monitoring evaluative data is continued
 - The focus is more on to integrate the curriculum with other subjects

2. Ten questions to ask when planning a course/curriculum (Harden RM, 1986):

- What are the needs in relation to the product of the program?
- What are the aims/objectives?
- What content should be included?
- How should the content be organized?
- What educational strategies should be adopted?
- What teaching methods should be used?
- How should assessment be carried out?
- How should details of the curriculum be communicated?
- What educational environment or climate should be fostered?
- How should be the processed be managed?

3. Approaches to address Harden's questions

- Approaches with the particular focus for curriculum planning:
 - Engineering approach – aims and objectives
 - It implies tell us what you want and we will do it.
 - Just like the bridge builder say give me the specification of the bridge and we will do it.
 - Similarly in curriculum terms, the focus for planning is a detailed statement of the aims of the medical school or institution plus general and specific objectives corresponding to these aims.
 - The belief is that the first stage in curriculum planning must be the specification of the aims and objectives and that all other work relating to the curriculum is secondary to this activity.
 - This approach has the advantages:
 - At first sight it appears to be a logical approach to curriculum planning (rational curriculum plan).
 - It may be seen to be useful tools because teachers know what they have to teach and students know what they have to learn.
 - If ones do not know where one is going how can one plan how to get there?
 - There are, a number of major disadvantages with this approach:
 - It is not always possible to pre-specify precisely the intended outcomes of the curriculum.
 - Excessive detail in statements of objectives may obscure the overall concepts or aims of the curriculum.

- Revision and updating of objectives is very time consuming; if this is not done regularly the curriculum will become obsolete.
- Perhaps the most serious problem with this approach is that medical teachers are uncomfortable with it.
- Mechanic's approach – teaching methods and techniques
 - The car mechanic is concerned more with the type of engine, the number of cylinders and the break horse power that with the direction of the car and distance it has travel.
 - In the same way in curriculum planning, rather the aims or objectives being the focus for change, that focus is the techniques used to execute the curriculum.
 - These include:
 - Computer and computer-assisted learning
 - Problem-solving
 - Small-group teaching
 - Hands-on practical experiences
 - Traditional lectures
 - Unwin (1985), has drawn attention to the disadvantages of this approach:
 - Technique is not a major element in the success or failure in a course of instruction.
 - In this approach the curriculum is viewed as what happens to students in the school or institution in term of their learning experiences.
- Cook book approach – content
 - A detailed list is made all contents for the curriculum listed like a cookbook recipes.

- Advantages of the this approach:
 - Medical teachers can often think in terms of list contents for more easily than in terms of objectives.
 - If all the ingredients are present and correct then the overall product will be satisfactory.
- Disadvantages of this approach:
 - It tends to concentrate on the detail of specific parts rather than taking a broader overview of the whole course.
 - The approach ignores any overall policy or strategy.
 - The criteria of selection of contents are often not made explicit and may be related to the areas of interest of those who are planning the curriculum rather than to the student needs.
 - May get into difficulties when decisions have to be taken
 - on the basis of the percentage of time devoted to each subject (timing too important).
 - on whether content should be chosen for its relevance to current practice or for its relevance to education and the development of the student (or both).
 - All the ingredients or contents may be present but if they are not put in the right time, the result may be ineffective.
- Railway approach – time table

- The railway timetable is full of routes and the times when the trains arrive and depart at various stations.
- Similarly in this model of curriculum planning, the emphasis is
 - on which courses are held in each phase of the curriculum or term
 - on what happens at each hour of the day
- The basis for developing the curriculum is a timetable documents.
- Advantages of this approach:
 - This approach is an appealing one in the sense that it leads to a document which can be immediately implemented.
 - It is a practical approach for curriculum planning.
- Disadvantages of this approach:
 - It direct attention away from the any fundamental rethink of curriculum aims and objectives and tend to perpetuate status quo e.g. in teaching methods.
 - Takes account of the logistics situation, including human resources and other resources available and the constraints.
- Detective approach – problems
 - The emphasis is on identifying the problems in relation to the existing curriculum and once the problems have been identified, the proposed changes attempt to put them right.
 - Information about the problems:

- Can be drawn from hearsay evidence on existing practices.
- It can be based on the views of teachers in the curriculum.
- It can be based on the views and experiences of the students.
- Advantages of this approach:
 - It concentrates attention on areas where change may be beneficial.
 - Identification and agreement about the problems may produce motivation for change.
 - Staffs that have gone through the process of identifying the problems are more likely to accept the need for, and direction of, curriculum change.
 - This approach collects hidden or widely dispersed information about the current position, allowing clarification and reasons for change.
- Disadvantages of the approach:
 - Teachers may feel that they are being investigated, this can create resentment and, instead of co-operation, a resultant opposition to change.
 - It focuses attention on the past rather than the present and future.
 - Various clues may be misinterpreted and the underlying diagnosis or reasons may be ignored or misunderstood. This is equal to the doctor treating the presenting complain and ignoring the underlying pathology.

- Religious approach – ideas
 - Just as in religion, where there is a cause, a principle or a system of tenets held with ardour, devotion, consciousness and faith, so those responsible for planning the curriculum may hold some value or aspect of curriculum planning to be of supreme importance.
 - In this approach the focus for curriculum development is some idea or approach which is not questioned which almost becomes an act of faith and which dominates the curriculum planning.
 - Problem-based learning and integration has been used as examples because it is relatively new ideas.
 - Advantages of this approach
 - It leads to the incorporation of any development in the curriculum.
 - disadvantages of this approach
 - The methods or techniques which are not open to discussion and has to be accepted as an act of faith.
- Bureaucratic approach – rules and regulations
 - The major factor to curriculum planning in this approach is the rules and regulations of the institution or school.
 - E.g. subjects that must be taught in the curriculum necessary qualification of teachers (all teacher must have PhD degree).
 - Some of the rules may be imposed on the school by government or a national body.
 - Advantages of this approach

- For the orderly running of any curriculum there must be basic guidelines covering the issues
 - Disadvantages of this approach
 - When the rules determine the character and shape of the curriculum, the educational objectives sink out of sight.
 - Public relation approach – public image
 - The main emphasis in curriculum planning is on the public image of the institution and its curriculum.
 - What matters is the perception from the viewpoint of outside bodies, potential applicants, sources of funds and the public at large.
 - Disadvantages of the approach
 - Lead to inappropriate curriculum in that what matters is the public perception of the school rather than the details and facts of the curriculum of it exists.
 - If the image is one of a school whose produce is already excellence and unable to be improved upon, any curriculum change becomes difficult.
 - Magicians approach – it appears speedily without being clear where it come from and who has been responsible
- Approaches with an emphasis on the pattern of staff involvement
 - United nation approach
 - Decisions are taken by a group representing a wide variety of interest and constituencies.
 - Advantages of this approach
 - Different interests are represented in the decision-making process but if the numbers are

large it may make the group less effective as a decision-making body.

- Staff may be on the group or committee because of their position rather than because of any interest or expertise in curriculum planning or the teaching of their subject.
 - The responsibility of all members of the committee is to serve the good of the overall body or curriculum.
 - This approach may be practical as it represents a range of interests.
 - Implementation of a new curriculum will be facilitated if the representatives on the curriculum committee are the people with power.
- Disadvantages of this approach
 - There is a tendency for individuals on the committee to regard themselves as representing their discipline or department rather than the school as a whole. As a consequence, the approach emphasizes the territorial claims of departments rather than presenting an overall view of the curriculum.
 - Size of the group to be involved in planning:
 - The larger the group, the more peer pressure there is from colleagues, the more general overview is obtained and the fewer individuals need to serve on several committees to keep in touch with what is happening.

- The smaller the group, the easier it is to organize action and the less staff time it takes.
- People congress approach
 - In this approach all who are concerned in any way with the curriculum or with teaching take part in decision-making.
 - Advantages of this approach
 - It surveys a broad sample opinion
 - It is seen as more democratic than other approaches
 - It can override or overrule any single powerful personality
 - By involving staff in the planning it facilitates the implementation of curriculum change
 - Disadvantages of this approach
 - The consensus agreement may be more theoretical than actual when many people remain silent and do not contribute to the discussion. If the process is not organized properly, the general confusion allows one or two individuals to dominate the proceedings as others opt out of the discussions.
 - The group may be too large to reach real decisions and produce plans.
 - It may be wasteful in time and not cost-effective.
 - It is easy to get side-tracked on minor issues and difficult to maintain concentration on the major issues.

- It may be raised barriers to change rather than solutions by confirming staff's previous prejudices.
- It tends to break up into smaller groups or subgroups because of the large number of people involved.
- Dictator approach
 - In this approach, one person, e.g. the dean of the medical school, has very clear idea of what curriculum changes he wishes and how these can be brought about.
 - Advantages of this approach
 - Strong leadership and usually a clear goal to which progress is made
 - Most effective and efficient way of bringing about change in a curriculum.
 - Disadvantages of this approach
 - Much will depend on the quality of the leader, on his perception of the needs of the curriculum and on his relationship with his colleagues. If his views on the curriculum do not correspond with what in fact is required, then the curricular end-products may be inappropriate and difficult to implement effectively.
- Consumer approach
 - The consumer can be divided into 3 categories:
 - Primary – student
 - Secondary – public who will face the product of the training process.

- Tertiary – the other members of the health care team with whom the doctor will work, including nurse, social worker and etc.
- Primary consumer – student:
 - In the past, students have been very active and influential in bringing about curriculum change.
 - When discussing the present situation they will be more aware than members of staff of the hidden curriculum (those parts of the curriculum and learning experiences which are not formally identified and therefore do not appear in timetable and syllabi).
 - They may be aware of the climate of the educational environment.
 - Their role in curriculum development has often been very helpful and their views frequently reflect a degree of maturity which surprises some staff members.
 - They are better informed than many staff in term of the extent of the curriculum.
 - Disadvantages:
 - Their point of view is at only one point in time.
 - Students do not have broad educational background and an overview of medicine which will allow them to make appropriate judgment.
- Secondary consumer – the public:
 - Perhaps almost completely neglected in the process of revising the curriculum has been the

customer for whom its finished product is intended.

- The public and patient groups have become much more articulate in their criticism of medical education.
- More attentions have been focused on patient-doctor communication.
- A representative of this group made valuable contributions.
- Tertiary consumer
 - If the care of patients is in the charge of a health care team a different professionals working together, it may be useful to have some representative of the other professions on the curriculum committee.
 - They can provide an insight into some underlying problems of the medical curriculum and such opinions and views may be of assistance to those developing the curriculum.
- Consultant approach
 - In this approach some outside assistance or resource is harnessed in the form of a consultant. It is not consultant's responsibility to decide or make decision, they just put forward proposal or recommendation to the curriculum planning.
 - Advantages of this approach
 - Consultant can be or should be able to take an objective and unbiased view of the curriculum.
 - He may be sufficiently apart from local politics not to be influenced by them.

- He will have experience of alternative approaches to medical education and experience well beyond that of staff whose experience has been limited to that of their own medical school.
- The consultant brought in to advise about the curriculum can give the task the high priority that is required of it, whereas the local teachers may well, but may be diverted from the task due to a lot of commitments to their job.

4. Curriculum development plan

- Needs assessment
- Goal statement
- Task analysis
- Instructional objectives
- Evaluation criteria
- Evaluation instruments
- Design learning situations

5. Steps in curriculum development

- Step 1: Organizational Development
 - Clear statement of the outcome
 - Long and mid term planning
 - Provision and collection of resources
 - Strategies for quality control
- Step 2: Program development
 - Contextual analysis
 - Knowledge analysis with its sub topics
 - Writing of the skills lists with its sub topics
 - Writing the course list
 - Composition of the course map with its sub steps

- Statement about skills tests and evaluation writing the implementation draft
- Editing the draft program
- The draft program the serve as the basis
- Step 3: The development of curriculum development
- Step 4: The development of learning objectives
- Step 5: The development of teaching and learning methods
- Step 6: The development of teaching and learning materials
- Step 7: The development of human resources and skills

Reference:

1. Harden RM (1986b), Approaches to curriculum planning, *Medical Education*, Vol.20, pp458-466.