MODELS OF CURRICULUM DEVELOPMENT

1. Curriculum model
   • A model can give order of the process
   • Curriculum development is a task, it requires orderly thinking. It needs to examine both the order in which decisions are made and the way in which they are made to make sure that all relevant considerations are brought to bear on these decision – Taba
   • Curriculum models can be divided into 2 major categories:
     o Prescriptive models
       ▪ Are concerned with the ends rather than the means of curriculum. One of the well known example is the objective model which arose from the initial work of Ralph Tyler in 1949
         • What curriculum designer’s should do?
         • Hoe to create a curriculum?
     o Descriptive models
       ▪ Emphasizes the importance of situation or context in curriculum design:
         • What curriculum designers actually do?
         • What a curriculum cover?
       ▪ Curriculum designers thoroughly and systematically analyse the situation in which they work for its effect and internal factors is assessed and the implication for the curriculum are determined
   • The purpose in presenting few models here is to acquaint with some of the thinking that has gone and is going on in the field oh health personal education

2. Different models in Curriculum Development
• Ralph Tyler model (1949)
  o Tyler’s 4 question of instructional development:
    ■ What are the purposes of the school?
      • Think about, justify, delineate (outline) what you are going to teach, how this material is relevant to the common, and current purposes of schooling?
    ■ What educational experiences (interaction between teacher and student during learning) are related to those purposes?
      • What content, processes and methods are you going to use to deliver instruction and information?
    ■ What are the organizational methods which will be used in relation to those purpose
      • In the context of educational purposes, how can effectively organize the information and presentations so that they are effective?
    ■ How will these purposes be evaluated?
      • How do you know you taught the content or process successfully?

• Taba Model
  o The curriculum should be designed by the teachers rather than higher authority
  o Teacher should begin the process by creating specific teaching learning units for their students rather than initial creation of a general curriculum design
  o Taba proposed 8 steps sequence for curriculum planning:
    ■ Diagnosis of needs (need assessment)
    ■ Formulation of objectives
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- Selection of contents
- Organization of contents
- Selection of learning experiences
- Organization of learning activities
- Determination of what to evaluate and the ways of means of doing that
- Checking for balance and sequence

**Ralph Tyler identify two words ‘sources’ and screen’ (monitor, check, observe) in is model**

![Diagram]

- **Student**
- **Society**
- **Subject**

  ![Tentative general objectives]

- **Philosophy of learning**
- **Psychology of learning**

  ![Precise instructional objectives]

- **Selection of learning experiences**
- **Organization of learning experiences**
- **Evaluation of learning experiences**

- **Mager objective model**
  - It is simple, easy to use and can be adopted for most course units.
It is a well recognized model which lends itself to both skilled and novice (trainee, learner) instructional design.

Mager model answers the following questions:
- What should the learner be able to do?
- Under what conditions do you want them to be able to do it?
- How well must it be done?

Mager model concentrates on:
- Behaviours
  - Performance expected as well as a result of successfully completing the class or training
- Conditions
  - Define under what qualifying factors the student is expected to apply the knowledge/skills acquired as a result of training
- Criteria
  - Standards of performance that are measurable or demonstrate as mastery of the learning objectives

CIPP model/ process model
- The Phi Kappa National study committee on evaluation chaired by Daniel L Stufflebeam developed the CIPP model.
- This is basically a model for curriculum evaluation rather than curriculum development.
- It is model useful for making important decision concerning the value and worth of the curriculum.
- It is believed that certain benefits are there from using the same model for curriculum development and evaluation.
- The CIPP model use for curriculum
  - C – Context
• To define the operating context within which the curriculum will be delivered
• Determine the specific characteristics of the learners that helps to establish

**I – Input**
• Identify the assess and capabilities
• Determine what the resources are needed to achieve the objectives
• Search for external resources when required

**P – Process**
• Identify the procedural design that will be used for implement the curriculum
• The general objectives are translated to specific objectives that constitute the instructional design

**P – Products**
• Define the measurable outcomes of the curriculum during and at the end of instruction
• The outcome are directly related to the curriculum objectives

  o Context → Input → Process → Products

• Instructional design model
  o There are different models of the design process but all with certain amount of common
    ▪ Dick and Carey model (1978)
      • It has set of sequential tasks, with interaction or cycling trough the stages
    ▪ Roblyer model (1988)
    ▪ Gagne and Briggs (1974)
    ▪ Briggs, Gustafsan and Tillman (1991)
o The component:
  ▪ Need analysis
  ▪ Learning objectives
  ▪ Evaluation plan
  ▪ Instructional strategy
  ▪ Theoretical framework
  ▪ Context for the instruction
  ▪ Evaluation
    • Formative
    • Summative
  ▪ SPICES model
    o Innovative approach
      ▪ Student Oriented
      ▪ Problem based
      ▪ Integrated
      ▪ Community based
      ▪ Electives
      ▪ Systematic/spiral
    o Conventional approach
      ▪ Teacher centred
      ▪ Information oriented/gathering
      ▪ Discipline based
      ▪ Hospital based
      ▪ Standard/uniform programme
      ▪ Apprenticeship based or opportunistic

o Student centred vs. teacher centred learning
  ▪ Student centred
    ▪ Student centred education focuses on the capabilities and motivation of the learners
• Student takes responsibility for their own education as undergraduates and throughout their professional career. It is an active learning approach.
• Teaching guides self-directed learning, small group tutorials, problem-based learning, avoiding formal teaching sessions.
• The student, under the guidance of the teacher, decides:
  o Learning objectives
  o Course content
  o The method that student will use to achieve the objectives
  o The learning resources
  o The sequences and pace of learning
  o Time assessment

Teacher centred
• Teacher centred education emphasis is on the teacher and what they teach.
• The teacher is the centre of the key figure. The emphasis is on activities such as formal lecture or formal laboratory activities. Learning is passive.
• Individual student has little control over what they learn.
• Teacher decides:
  o Learning objectives
  o Course content
  o The method that student will use to achieve the objectives
  o The learning resources
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- The sequences and pace of learning
- Time assessment

- Problem Based Learning (PBL)
  - McMaster University in Canada, Maastricht in Netherlands and Newcastle in Australia
  - The purposes of this approach
    - To use problem based learning as a vehicle to develop a usable body of integrated knowledge
    - To develop the problem solving skills
    - PBL is the learning that result from the process of working towards understanding or resolving a problem
  - The key features of a problem based curriculum are to:
    - Analyse health care problems as the main method of acquiring and applying knowledge
    - Develop independent life long learning skills by the students
    - Use a small tutorial groups, as the central educational event

- Integrated teaching vs. discipline base teaching
  - Integrated teaching is the organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or department
  - Traditional discipline base/specialty base
    - Emphasis on the classical disciplines
    - Contact with patient tends to be late
    - It is building block principle
    - Early exposed subjects lay the foundation for the subjects that follow
  - Integrated teaching
• Integration of the curriculum:
  o Multiprofessional education – students of different professions are taught together
  o Multidisciplinary integration
    ▪ Horizontal integration – topic traditionally taught separately are taught together
    ▪ Vertical integration - Topics taught by 2 or more department

• Early introduction of clinical subject through the curriculum
  o Community based vs. hospital based education
    ▪ Factors supporting Community based education
      • Provides community orientation
      • The community provides useful learning experiences
      • Makes use of untapped resources
      • Encourage active learning
      • Introduction to the health care system
  o Uses of SPICES model
    ▪ The review of an existing curriculum by a curriculum committee
      • It helps to assess whether the curriculum relates to the perceived objectives or aims of the school
    ▪ The development of the new curriculum
      • Issues reviewed in the SPICES model can provide a frame work, around which a more meaningful discussion about curriculum planning can take place
- The tracking of specific questions or issues relating to the curriculum
- Decisions about teaching methods
- Decisions about assessment