

# COURSE KNOWLEDGE AND CURRICULUM

# Unit - V CURRICULUM EVALUATION AND CHANGE



# The nature of evaluation

- In its broadest sense, evaluation is concerned with making judgments about things. When we act as evaluators we attribute 'value' or 'worth' to behaviour, objects or processes.
- Evaluation requires that judgments be based on appropriate and relevant data.
- In education it is inexcusable to make fanciful evaluations, even if based on the so-called 'intuitive reaction' of experienced teachers.
- An effective evaluation of a curriculum or a student's performance will be based upon appropriate data and will reflect what that data reveal.



# The nature of evaluation (Cont.)

- > Evaluation in our schools is essentially concerned with two major approaches to making judgments:
- > Product evaluation is an evaluation of student performance in a specific learning context.

For Example, a school report is an example of product evaluation.

• Process evaluation examines the experiences and activities involved in the learning situation i.e. making judgments about the process by which students acquired learning or examining the learning experience before it has been concluded.

**For example**, process evaluation may be conducted upon the nature of student—teacher interaction, instructional methods, school curricula, a program for gifted students, and so forth.

# **CONCEPT & DEFINITIONS**



#### Concept

- Curriculum evaluation is a relatively recent term that has become well recognized in recent years.
- It applies the processes of evaluation to the context of the curriculum and, in so doing, somewhat different notions of the evaluative task have emerged, including the following.
- Curriculum evaluation differs from other kinds of educational evaluation in that it focuses upon how teachers and students interact over a particular curriculum or syllabus...
- Curriculum evaluation may be seen as the final element in the curriculum process, as in the model of curriculum development advocated in this book.

# CURRICULUM EVALUATION CONCEPT & DEFINITIONS



### **Definitions**

- 'Curriculum evaluation is the process of delineating, obtaining and providing information useful for making decisions and judgments about curricula' (Davis, 1980:49)
- Worthen and Sanders (1987) define curriculum evaluation as "the formal determination of the quality, effectiveness, or value of a programme, product, project, process, objective, or curriculum"

# **FUNCTIONS**



- Evaluation is essential to provide feedback to learners.
- Evaluation is essential in determining how well learners have achieved the stated objectives.
- Evaluation provides information to improve curricula. Evaluative data, collected during a unit of study, will provide the basis for changes that will make the curriculum more effective in meeting objectives.
- Information from evaluation is employed by students in personal decision making.
- Evaluation provides useful information to curriculum developers to clarify the stated objectives.
- Those interested in how well students perform in schools—parents, educational systems, employers, universities, government planners and so forth, need constructive information on student performance to enhance their decision-making effectiveness

# **DIMENSIONS**



• Three forms of evaluation are commonly accepted by educators as being important, particularly to student evaluation and curriculum evaluation, although these forms are not used equally well or frequently.

#### 1. Formative evaluation

• Formative evaluation is directed towards providing information on learner performance at one or more points during the learning process.

For example, a home economics teacher is interested in determining the degree of mastery during a learning task (sewing a shirt) and to pinpoint that part of the task not mastered.

#### 2. Summative evaluation

• Summative evaluation is directed toward a general assessment of the degree to which the larger outcomes have been attained over the entire course or some substantial part of it; that is, evaluation employed at the end of a learning experience to indicate student achievement. Major examinations (HSC, TEE, for example) provide data for end-of-schooling evaluation

### **DIMENSIONS**



#### 3. Diagnostic evaluation

- Diagnostic placement evaluation is directed towards two purposes, either for of students properly at the outset of an instructional period (such as secondary school), or to discover the underlying cause of deficiencies in student learning as instruction unfolds.
- The essential feature of diagnostic evaluation, therefore, is to provide useful information on student performance in order to address perceived problem.

# **APPROACHES**



#### 3. Diagnostic evaluation

• Three evaluative components (measure- ment, assessment, evaluation) in the following example shows how the concept of evaluation may be conducted in schools.

#### **Approaches**

#### 1. Norm-referenced assessment

- Norm-referenced assessment compares the performance of an individual with that of other students, using the same measuring device.
- This may be a test, an essay, an exam, a work sample, a performance checklist and so forth.
- The student's performance is then reported as a grade, mark, percentile, docile, quartile or whichever form has been selected in the school context.

# **APPROACHES**



#### 2. Criterion-referenced assessment

- Compares by contrast to the method above, criterion-referenced assessment an individual's performance with a predetermined level or standard of performance.
- It assesses whether a learner has achieved what is required to establish certain standards in the learning task. For example, a student learning to play the piano must achieve certain standards or reach certain criteria at a level in order to proceed to the next level

#### 3. Outcome statements

• Recent developments within educational systems around Western country, based upon the perceived need for greater curriculum accountability within schools, have witnessed the restructuring of reporting and assessment activities in terms of what are referred to as learner outcome statements and grade descriptors.

# **APPROACHES**



#### 4. Measurement instruments

- For assessment to be undertaken effectively and validly we have said that measurement data must be first obtained.
- Measurement has been defined as a statement of performance, usually that of the student but also possibly including the performance of the teacher, a program or the curriculum.
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# **APPROACHES**



• The list below is not exhaustive although it will be of value to educators conducting product and process evaluation.

- > standardized tests
- >teacher-made tests
- >work samples
- **>**oral tests
- >systematic observation
- >Interviews

- >questionnaires
- >checklists and
- rating scales anecdotal records
- **>** sociograms
- >self-reports

# **APPROACHES**

#### 5. Standardized tests

- Commercially developed and produced tests which have been normed against a standard population are known as standardized tests.
- Most of the commercially available achievement intelligence, readiness and ability tests are standardized.

#### Some of the more useful standardized tests include:

- ACER Intermediate (A, G or 1).
- Ravens Progressive Matrices.
- Stanford-Binet Intelligence Scale (individual IQ).
- Wechler Intelligence Scale for Children (individual IQ).



# **APPROACHES**

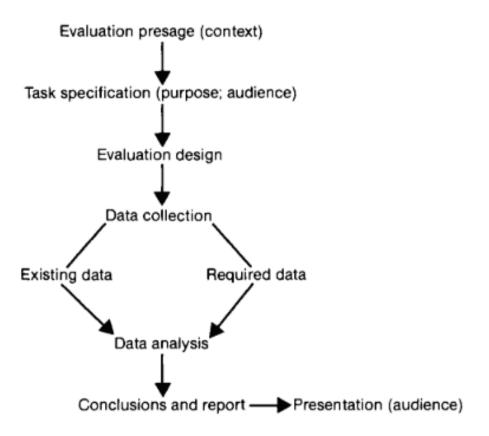


Fig. Curriculum evaluation algorithm



#### **NEED AND IMPORTANCE**

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#### **PHASES**

# Curriculum evaluation algorithm

- This algorithm suggests that the process of curriculum evaluation consists of seven integrally related sequential steps.
- Teachers and curriculum evaluators follow may these steps in undertaking evaluative the task. regardless of whether that task is the evaluation of a class-level curriculum, a school curriculum, a curriculum system or somewhere in between.

#### Seven steps/phases of the algorithm

- **1. Evaluation presage:** understanding of the evaluation context.
- **2. Task specification:** delineating the scope of the evaluation (whom is it for, what is involved, relate to objectives).
- 3. Evaluation design: devise plan for conducting evaluation.
- 4. **Data collection:** obtaining data both from existing sources and by using techniques devised in design stage.
- **5. Data analysis:** analysis, synthesis and interpretation of data as organised in design stage.
- 6. **Conclusion:** prepare conclusions based on results and prepare report.
- 7. Present conclusions and recommendations to audience.





#### TYLER'S OBJECTIVE-CENTERED EVALUATION MODEL

#### Introduction

• The Curriculum Evaluation model by Tyler is a conceptual framework which brilliantly outlines a methodology to evaluate the progress of the students in correspondence with the principles or objectives established for it.

# The model consists of four steps:

- \*To determine the purposes or objectives
- Selection of educational experiences related to purpose
- Organizing learning experiences
- Evaluation of students performance

#### TYLER'S OBJECTIVE-CENTERED EVALUATION MODEL



#### The model can be divided into three sub-points:

- Specify Instructional Objectives
- Collect performance Data
- Compare performance data with the objectives/standards specified

#### **Tyler's Model Overview:**

- Insightful for curriculum design.
- Focuses on achieving underlying objectives

#### **Limitations:**

- Limits learning capability.
- Binds education to a defined syllabus.
- Lacks progress justification and regulation methods.
- Does not account for immeasurable or uncertain learning outcomes.
- Fails to consider constantly changing educational factors.



#### **Introduction:**

- Developed by Robert Stake in 1975.
- Qualitative approach to curriculum evaluation.
- \* Focuses on the congruence between the curriculum and student needs/context.

#### **Evaluation Focus**

- Emphasizes the importance of formal procedures to increase objectivity.
- Aims to provide data for descriptions and judgments of the curriculum.

#### **Evaluation Approach**

- Should not rely solely on statements of objectives and aims.
- Encourages extensive participation from all those affected by the curriculum in the evaluation process.



#### **Bodies of information**

Robert Stake's maintains that the data can be collected under the following three bodies of information.

#### **Antecedent**

\* This is any condition that exists prior to teaching and learning that may influence the outcomes. For example, prior knowledge, aptitudes, psychological profiles of students, etc., years of experience of teachers, teacher-behaviour, etc.

#### **Transactions**

\* Learning transactions that occur between and among teachers and students, students and students and among students and resource people.

#### **Outcomes**

\* These are the consequences of education – immediate and long-range, cognitive and conative, personal and community-wide. For example, students' performance, achievements, etc.



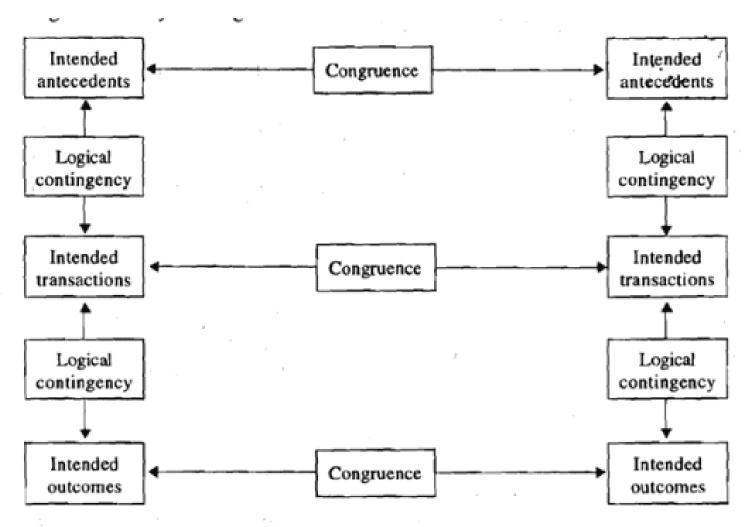


Fig. 17.2: Stake's Congruence-Contingency Model.

(Source: Ornstein and Hunkins.)



#### Advantages

- It is a qualitative approach, which means that it takes into account the subjective experiences of the students and the teachers.
- It is a comprehensive approach, which means that it considers all aspects of the curriculum.
- It is a flexible approach, which means that it can be adapted to different types of curriculums and different contexts.

#### **Disadvantages**

- It can be time-consuming and expensive to implement.
- It requires a high level of expertise to use effectively.
- It can be difficult to get all stakeholders involved in the evaluation process.

#### CURRICULUM REVISION



# Concept

• It refers to the process of reviewing the curriculum plan, if it does not prove to be effective on the following questions, then it requires revision.

# Whether a curriculum is suitable in present context?

- Does the curriculum delivered as planned?
- What the curriculum is good for?
- How far the intended audience/target group is benefited?
- Whether it has included the latest methodologies?

#### CURRICULUM REVISION



#### **Features**

- Curriculum renewal can only take place when curriculum evaluation is done.
- Evaluation is an integral part of curriculum planning and designing.
- Evaluation involves both assessment of students and what actually happens in the classroom.
- Students' learning experiences are not confined to the classroom and rigid school schedules.
- Evaluation includes activities from the hidden curriculum, such as wearing a school uniform, standing up when the teacher enters, and organizing school exhibitions.
- Evaluation should consider both classroom activities and the school as a whole against curriculum issues.

#### CURRICULUM CHANGE AND INNOVATION



# **Curriculum change**

- Curriculum change invariably reflects change in the society at large and education in general.
- Hence most of what we deal with in curriculum change within the school context addresses ways of implementing change effectively.
- A specific curriculum innovation may lead society in changing in a particular direction, but usually curriculum change reflects societal change.

#### CURRICULUM CHANGE AND INNOVATION



# **Meaning of Curriculum Change**

- Curriculum change refers to the process of modifying, revising, or updating the content, structure, and delivery of a curriculum.
- Curriculum change is often driven by various factors such as changes in societal needs, advancements in technology, new knowledge and research, and shifts in student demographics and learning styles.
- The purpose of this is to improve the effectiveness of education and to better align it with the needs of students, society, and the workforce.
- The process of change involves a thorough analysis of the existing curriculum, identification of the strengths and weaknesses, and the development of a plan for modifying or updating the curriculum.
- It can be a complex and challenging process that requires the involvement of various stakeholders such as educators, administrators, subject matter experts, students, and parents.
- Effective change also requires careful planning and implementation, ongoing evaluation, and continuous improvement.

#### CURRICULUM CHANGE AND INNOVATION



# **Definitions of Curriculum Change**

- Hancock, Dyk & Jones (2012) define curriculum change as the transformation of the curriculum schemes for example its design, goals and content.
- According to Dziwa (2013), curriculum change is not a matter of supply of appropriate technical information rather it involves changing attitudes, values, skills and relationship.

#### TYPES OF CURRICULUM CHANGE



McNeil (2009) identified several types of curriculum change according to its complexity.

#### 1. Substitution

#### **Definition of Substitution:**

Substitution happens when a new element replaces an existing one, like teachers replacing an old textbook with a new one.

**Ease of Change:** This type of change is the simplest for teachers to implement.

Common in Schools: It is the most frequent type of change observed in educational settings

#### TYPES OF CURRICULUM CHANGE



#### 2. Alteration

**Definition of Alteration:** Alteration occurs when new content, items, materials, or procedures are added to existing materials and programs.

Nature of Changes: These changes are typically minor in scale.

Adoption in Schools: Schools can usually adopt alterations instantly.

#### 3. Perturbations

**Definition of Perturbations:** Perturbations refer to changes that initially disrupt the existing program but can be quickly adjusted by teachers to fit into the ongoing schedule.

**Example:** For example, teachers may need to modify their class schedules.

**Impact and Adjustment:** These changes may affect the time allocated for teaching other subjects or the schedules of other teachers, but they can be accommodated and adjusted shortly.

# TYPES OF CURRICULUM CHANGE



#### 4. Restructuring

**Definition of Restructuring:** Restructuring involves changes that overhaul the entire school system, such as when schools introduce a new curriculum to teachers and students.

Nature of Changes: These changes require teachers to adopt new teaching roles, curriculum content, and textbooks.

#### 5. Value-orientation

**Definition of Value-orientation:** Value-orientation changes occur when teachers or school staff are required to embrace new fundamental philosophies or curriculum orientations.

Condition for Change: These changes depend on their willingness to accept the new values; otherwise, the changes will not be sustainable.

# PROCESS OF CURRICULUM CHANGE STRATEGIES



- 1. Participative Problem Solving: This approach focuses on understanding and meeting users' needs. The system identifies its own issues, proposes solutions, tests and evaluates them locally, and implements satisfactory solutions.
- 2. Planned Linkage: This strategy involves intermediate agencies, like schools, to connect users with innovations.
- 3. Coercive Strategies: These strategies rely on authority and power, using legal documents such as laws and orders to enforce curriculum changes and innovations.
- 4. Open Input Strategies: This approach gathers ideas and resources from diverse sources, making it flexible, open, and practical for curriculum change and innovation.

# MODELS OF CURRICULUM CHANGE THE ADOPTION MODEL

- OULEGE OF CHANGE
- \*The model calls for a facilitator (principal) who performs first the role of sales person and later a training, role with school personnel so that they train others. The results in "the multiplier effect'.
- \*The principal together with senior members of staff monitors and helps with problems that arise during initial installation.
- \*Implementation requires attending to political, social and economic considerations in addition to technical, scientific and scholarly considerations.
- \*According, to this model, the principal should take initiative, in marketing curriculum change in an institution;
- \* The school does not function in isolation and is not a closed system, other structures should therefore be involved.

#### MODELS OF CURRICULUM CHANGE



#### **Integrative Development Model**

- \* The model deals with the immediate concerns of teachers.
- \* An assumption underlying this approach is that a climate for eliminating clouded vision, fears, and threats must accompany change.
- \* The use of this model in curriculum change management will be useful in the sense that the principal will embark on participatory decision making strategies, thus involving his staff.
- \* The groups will have an impact in the management of curriculum issues, where the personnel with different expertise will assist others in team building.

#### MODELS OF CURRICULUM CHANGE



#### The Change Agent Model

- Supporting Innovation: The principal can support innovation and delegate responsibility to curriculum designers, who influence all crucial aspects of the curriculum.
- External Innovations: Innovations from external sources serve as a catalyst, challenging teachers to explore various strategies, integrate the most effective elements, and address all learning domains.
- Principal as Change Agent: The principal, acting as a change agent, must possess the competence to manage extensive changes during the curriculum transformation process.