

Evaluation and Revision of a Curriculum

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Objectives

Introduction

The main aspects pertaining to the development of a curriculum were discussed in the previous Essential Reading. This Essential Reading will deal with the procedural steps related to the evaluation and revision of a curriculum. A set of selected definitions of evaluation will be presented at the outset. Then the major functions and roles of evaluation will be discussed. Six evaluation models and their related processes will be presented next. Under the section on ‘Salient Aspects of Curriculum Evaluation’, main features of a curriculum evaluation methodology, dimensions and qualities to be examined in a curriculum, characteristics of an effective curriculum evaluation, and competence and trustworthiness of evaluators will be discussed. A model for a comprehensive curriculum evaluation programme will be given in the next section. The Reading will conclude with a discussion on some activities associated with curriculum revision, general characteristics of the organization and procedure for curriculum revision, and a prototype form for gathering feedback information for curriculum revision.

5.1 Definitions of Evaluation

Many definitions of evaluation can be found in the literature. The definition originated by Ralph Tyler (1950) perceives evaluation as:

“The process of determining to what extent the educational objectives are actually being realized.”

Another widely accepted definition suggested by several leading evaluators such as Cronbach (1963), Alkin (1969), and Stufflebeam et al. (1971) views evaluation as:

“The process providing information for decision making.”

Three other definitions of evaluation found in the literature are as follows:

“Evaluation is the assessment of merit or worth”.

(Scriven, 1976; Glass, 1969; Stufflebeam, 1974; Eisner, 1979; House, 1980).

“Evaluation is an activity comprised of both description and judgment.”

(Guba and Lincoln, 1981; Stake, 1967).

“Evaluation is the systematic investigation of the worth or merit of some object.”

(Joint Committee, 1981).

5.2 Major Functions and Roles of Evaluation

5.2.1 Evaluation can serve many functions. Through an analytical review of evaluation literature David Nevo (1983) identified the following four functions of evaluation:

- i. **Formative function:** Evaluation, in its formative function, is used for the improvement and development of an ongoing activity such as the implementation of a curriculum or other educational programme.

Formative evaluation is a valuable and powerful tool helping curriculum planners to make rational and valid decisions. Development of formative evaluation opened up new possibilities for conducting and reporting curriculum evaluation.

- ii. **Summative function:** In its summative function evaluation is used for accountability, certification, or selection.

Summative evaluation concerns with evaluating an overall programme after it is in operation.

5.2.2 Summative evaluation contributes highly significant data for revising curriculum plans, formulating new ones, selecting new content and revising aims and objectives. In summative evaluation we measure the results of instruction according to a plan. It is based on tests, student reaction to the instruction, follow-up studies of student participation in an instruction programme, parent reactions, and employer ratings of graduates.

- iii. **Psychological or Sociopolitical function:** In this function evaluation is used to increase awareness of special activities, motivate desired behaviour of evaluatees, or promote public relations.
- iv. **Administrative function:** In this function evaluation is used to exercise authority, for example, a manager evaluating a subordinate officer.

Saylor et al. (1981) have identified three major roles of curriculum evaluation as follows:

1. **Appraisal of the outcomes of student learning in all of their ramifications.**

This type of evaluation which is familiar to most teachers and administrators is accomplished through testing, measuring, and assessing learner achievements, diagnosing individual progress, and comparing results with norms and scores of other members of the class or age group.

2. **Determining the value of the curriculum itself.**

Through answers to questions like the following:

Is the curriculum fulfilling its purposes?

Are the purposes themselves valid?

Is the curriculum appropriate for its target group of students?

Are the instructional models and the content selected, and the materials recommended appropriate?

3. **Judging the merits of all the administrative and managerial arrangements and practices and the structures within which the educational institution itself operates.**

5.2.3 Sedere (1989) perceives the functions of curriculum evaluation as follows:

- 1. Examining goals, aims, and general objectives of education;
- 2. Examining the expected student profile at the finishing stage of the school in the context of needs;
- 3. Selecting goal-directed appropriate subject content;
- 4. Organizing the content structure of the curriculum;
- 5. Selecting appropriate learning techniques and the methods;

6. Setting procedures and techniques of assessment and evaluation of student achievement in order to provide feedback, remedial teaching and certify success;
7. Assessing the impact of curriculum on the society in the long run and guide the revision.

It is important to realize the existence of several functions and roles of evaluation as discussed above, and to determine the specific functions or roles of the particular evaluation to be undertaken, at the initial stage of its planning. Before embarking on evaluating a curriculum a decision regarding the various aspects and dimensions of the curriculum to be evaluated has to be taken. The process of doing an evaluation might differ according to the theoretical perceptions guiding the evaluation.

Earlier approaches to evaluation focused largely on assessing the outcomes of curricula. The development of various evaluation models has contributed to expand the scope of evaluation variables. We will next discuss some of these evaluation models in order to understand the variables and procedural steps pertaining to the evaluation process.

5.3 Evaluation Models and Related Processes

5.3.1 Tyler's Behavioural Objectives Evaluation Model

Ralph W. Tyler (1950) defined education as changes in behaviour. Therefore evaluation of an educational programme, such as implementation of a curriculum, measures the extent of such changes in accordance with previously defined objectives of the programme. Tyler's evaluation model is based on his rationale for curriculum development, instruction and evaluation. We have already discussed Tyler's rationale in Reading One under Curriculum Theories. One of the four fundamental questions which this rationale sought to answer was concerned with evaluating the outcomes of curriculum. A representation of Tyler's rationale is shown in Figure 1.

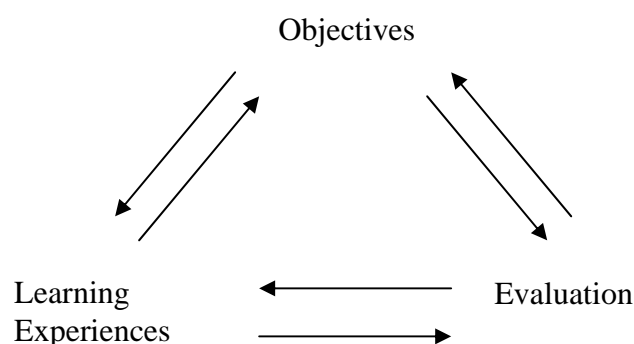


Figure 1. A Representation of Tyler's Rationale.

The arrow from Objectives to Evaluation in Figure 1 denotes that the objectives serve as the specifications for the development of evaluation procedures and instruments. The arrow from Evaluation to Learning Experiences indicates that learning experiences can provide exemplars for the development of evaluation tasks. The arrows from Evaluation to Objectives and Learning Experiences show that evaluation procedures or activities can provide information regarding the extent of attainment of objectives and the effectiveness of learning experiences.

Tyler's approach perceives evaluation as an activity intended to determine whether goals / aims have been achieved (Tyler, 1950). It recommends the following evaluation process:

1. Stating goals / aims in behavioural terms;
2. Developing measurement instruments;
3. Collecting Data;
4. Interpreting findings; and
5. Making recommendations.

Evaluation in Tyler's model is largely summative, based on testing, classifying, marking, and measuring student achievements. Thus it emphasizes summative evaluation of products. This model is related to the scientific management movement, and to the work of Franklin Bobbitt and W. W. Charters. However, this model practically makes no effort to find out the reasons for offering a particular programme, its effectiveness, or its appropriateness.

5.3.2 Decision Making or CIPP Evaluation Model

Phi Delta Kappa National Study Committee on Evaluation, in the United States, chaired by Daniel Stufflebeam (1972), developed a decision – making evaluation model for providing information for decision-making. This model was also called the CIPP Model; CIPP is an acronym for Context, Input, Process, and Product. In order to provide information needed by decision makers this model generates data regarding four stages of programme operation:

1. **Context evaluation**, which contributes to the definition of objectives and environment of the curriculum.
2. **Input evaluation**, which is necessary for decision making on matters of design. This part of the model involves determining appropriate and available resources to be used to attain the objectives.
3. **Process evaluation** is an ongoing monitoring of the evaluation to detect flaws which guides decision making on operations. This information is used to revise the model.
4. **Product evaluation** stage refers to assessing the product. This stage provides data for judging attainments, and hence, for revision, termination, or continuation.

The steps taken in the evaluation process for each of the four stages of the model are given below:

- i. Determining what is to be evaluated and the kinds of decisions to be taken;
- ii. Determining the kinds of data needed in making these decisions;
- iii. Collecting these data;
- iv. Defining criteria for determining the quality of the matter being evaluated;
- v. Analysis of data in terms of these criteria;
- vi. Providing information for decision makers.

5.3.3 Discrepancy Evaluation Model

Malcolm Probus (1971) developed a decision – making type of model somewhat related to Stufflebeam’s model. He referred to this model as ‘discrepancy evaluation model’. He viewed programme evaluation as the process of :

1. Defining programme standards;
2. Determining whether a discrepancy exists between some aspect of programme performance and the standards governing that aspect of the programme; and

3. Using discrepancy information either to change performance or to change programme standards.

Provus proposed the following five steps for the evaluation process:

- i. Clarifying the programme design;
- ii. Assessing the implementation of the programme;
- iii. Assessing its in-term results;
- iv. Assessing its long-term results; and
- v. Assessing its costs and benefits.

5.3.4 Goal-Free Evaluation Model

Michael Scriven (1972), the originator of the Goal-Free Evaluation Model, proposed that an evaluator should not be influenced, or biased, by the rhetoric of the programme developer's goal statements. Therefore the evaluator in goal-free evaluation has to be an unbiased observer. The information collected should have qualitative objectivity, that is, information should be free from bias or distortion. In considering the total consequence of a programme the evaluator is free to collect whatever data that appears to be pertinent. These consequences are then evaluated against demonstrated needs determined by the evaluator. It is important here to have consensus on the validity of the consequences reported by the evaluator, and on the definition of demonstrated needs used in the evaluation.

Goal-free evaluation is essentially a summative type of evaluation oriented to the consumers. It does not provide any useful formative data to curriculum planners. However, they can incorporate goal-free evaluation in a total evaluation programme to check on unfortunate consequences and decisions of educational programmes.

5.3.5 Stake's Countenance Evaluation Model and Responsive Evaluation Model

R. E. Stake (1976) in his Countenance Evaluation model suggested that two sets of information be collected regarding the evaluated object:

(i) Descriptive, and (ii) Judgmental.

- (i) The descriptive set of information should focus intents and observations regarding antecedents (prior conditions that may affect outcomes), transactions (the process of implementation), and outcomes.
- (ii) The judgmental set of information consists of standards and judgments regarding the same antecedents, transactions, and outcomes.

According to this model, the evaluation process should include the following:

1. Describing a programme;
2. Reporting the description to relevant audiences;
3. Obtaining and analyzing their judgments; and
4. Reporting the analyzed judgments back to the audiences.

Stake's Responsive Model (Stake, 1975) is oriented more directly toward programme activities than to programme intent. It responds to audience requirements for information. In reporting the success or failure of the programme, reference is made to the different value-perceptions present. In this model, various observers are made to observe the programme. Observers then prepare brief narratives, portrayals, graph displays, or other types of information. Stake suggests here a continuing 'conversation' or 'dialogue' between the evaluator and all other parties associated with the evaluation. He has even specified several steps of dynamic interaction between the evaluator and his / her audiences in the process of conducting an evaluation.

5.4 Salient Aspects of Curriculum Evaluation

It appears from the above discussion on evaluation models that there is no agreement among evaluation experts regarding the “best” process to follow when conducting an evaluation. However, most of them agree that all evaluations should include a certain amount of interaction between evaluators and their audiences at the outset of the evaluation to identify evaluation needs, and at its conclusion to communicate its findings. Evaluation cannot be limited to the technical activities of data collection and analysis. This highlights the imperative need for obtaining the views and experiences of practising teachers in evaluating a curriculum. It needs to be emphasized here that designing and disseminating a curriculum change is **not implementing** the curriculum change. What happens inside the school, at the service delivery level, is absolutely related to its success or failure.

5.4.1 Main Features of a Curriculum Evaluation Methodology

In this context the main features of a curriculum evaluation methodology can be listed as follows:

1. Identifying descriptive dimensions of the curriculum;
2. Specifying practices implied by the curriculum;
3. Describing actual practices;
4. Comparing actual practices with intended practices.

5.4.2 Dimensions and Qualities to be examined in a Curriculum

Through a review of relevant curriculum literature Kenneth A. Leithwood (1981) has identified eight apparently distinct dimensions of a curriculum as follows:

1. Platform: A system of implicit and explicit beliefs and assumptions used as the basis for deciding what to include in and exclude from the curriculum;
2. Objectives: Intended outcomes, for the student, of curriculum implementation;
3. Student entry behaviours: Competencies the student is expected to possess at the outset of a programme;
4. Content: Subject matter included in the curriculum;
5. Instructional material: All written, visual, audio, or other forms of replicable material directly confronted by the student;

6. Teaching strategies: Patterns of teacher behaviour or modes of teacher-mediated “product” presentation designed to facilitate student learning;
7. Learning experiences: The mental operations and physical acts engaged in by students in response to curricular stimuli;
8. Assessment tools and procedures: Test items and test forms and procedures.

It is also important that curriculum evaluators should examine the following qualities of the curriculum:

- Articulation
 - each part of the curriculum fitting the other parts.
- Balance
 - balance between college preparation courses and vocational or business courses;
 - balance between subjects;
 - balance of subjects within the disciplines.
- Continuity
 - absence of disruptions in the curriculum contributing to learning difficulties.
- Scope
 - breadth of the curriculum;
 - number of subjects offered at a particular level, or on a particular day;
 - the variety or breadth of content each subject offers.
- Sequence
 - the order in which objectives, content, and activities are presented.
- Coherence
 - relationship among curriculum components.

The above qualities of the curriculum must be tied up to the system’s or institution’s philosophy or mission statement.

5.4.3 Characteristics of an effective Curriculum Evaluation

A curriculum evaluations should have the following characteristics in order to perform the necessary functions effectively:

- i. Consistency with objectives: Evaluation must be consistent with the objectives of the curriculum;
- ii. Comprehensiveness: Evaluation programme should be as comprehensive in scope as are the objectives of the institution. Evaluation should use adequate instruments;
- iii. Diagnostic value of results: The results of the evaluation should be sufficiently diagnostic to distinguish various levels of performance or mastery attained and describe the strengths and weaknesses in the processes and in the product of performance;
- iv. Validity: The validity of evaluation instruments or the capacity of evidence to describe what it was designed to describe is very important in improving curriculum and teaching;
Difficulties with validity increase when the objectives are diffuse, vague, and abstract, and bear no relationship to recognizable behaviours;
- v. Unity of Evaluative Judgment: there is a need to bring together the evidence secured from different instruments and on different aspects of the evaluation programme into a pattern so that a meaningful portrait of the individual and of the group is available;
Otherwise the judgments may be faulty no matter how objective or dependable each piece of evidence is.
- vi. Continuity
Evaluation should be a continuous process and an integral part of curriculum development and instruction.

5.4.4 Competence and Trustworthiness of Evaluators

Curriculum Evaluation should be conducted by individuals or teams possessing

- (a) extensive competencies in research methodology and other data analysis techniques;
- (b) an understanding of the social context and the unique substance of the curriculum;
- (c) the ability to maintain correct human relations and to develop rapport with individuals and groups involved in the evaluation; and
- (d) a conceptual framework to integrate the above mentioned capabilities.

5.5 A Model for a Comprehensive Curriculum Evaluation Programme

A Comprehensive programme of curriculum evaluation should involve a broad scope of data including data on achievement, on factors affecting learning, and on teaching–learning processes. It should also include steps and procedures for translating the objectives into evaluation data and these data into hypotheses about the needed changes in curriculum and instruction. A model for such a comprehensive curriculum evaluation programme created by the Commission on Evaluation (Hilda Taba, Chairperson) and Association for Supervision and Curriculum Development is presented below (Taba, 1962):

5.5.1 A Model for a Comprehensive Curriculum Evaluation Programme

1. Deciding what kinds of evaluation data are needed:

A. Objectives and Evidence pertaining to Objectives

Thinking abilities;
Attitudes;
Skills;
Creativity;
Concepts;
Levels of perception;
.....

B. Factors Affecting Learning

Class culture backgrounds;
Peer culture influences;
Social learning;
Initial level of subject matter mastery;
Motivational patterns;
Special abilities;
Feelings;
.....

C. Teaching – Learning Process

Nature of assignments;
Procedures for maintaining control;
Patterns of teacher response to pupil behaviour;
.....

D. Teaching Methods

Telling;
Discovery;
Laboratory Work;
Recitation;
Discussion;
Practical Activities;
Group work;
Use of problems / issues;
Demonstration;
.....

2. Selecting or constructing the needed instruments and procedures. These may include:

Objectively scored tests;
Essay tests and other written exercises;
Sentences completion tests;
Tape recorder techniques;
Attitude scales;
Social class scales;
Interest inventories;
Behaviour check lists;
Sociograms and participation flow charts;
Questionnaires;
Interviews;
Performance tests;
Rating scales for performance and products;
Anecdotal records;
.....

3. Analyzing and interpreting data to develop hypotheses regarding needed changes.
The broad patterns of relationships to be studied are shown in Figure 2.

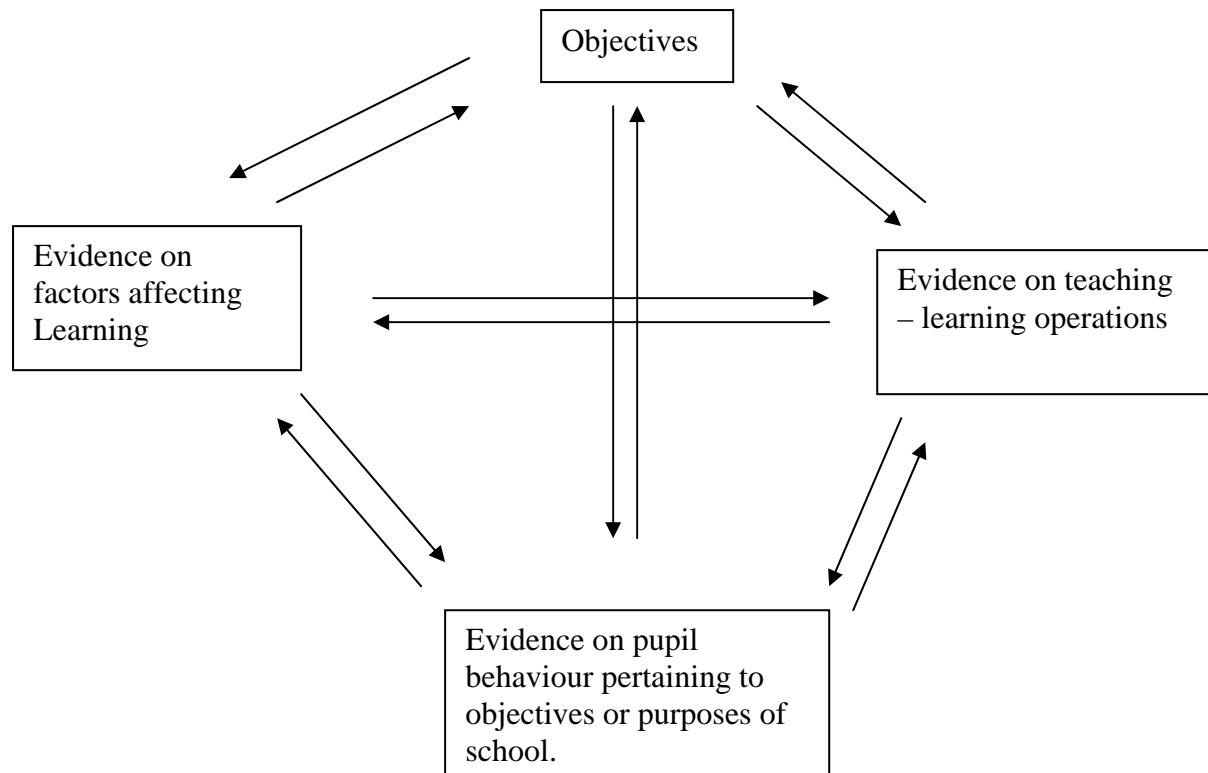


Figure 2. Broad patterns of relationships to be studied in Curriculum Evaluation.

4. Converting hypothesis into action.

5.6 Curriculum Revision

5.6.1 Some Activities associated with Curriculum Revision

Some of the activities associated with curriculum revision, or curriculum improvement can be listed as follows:

1. Work of supervisors and in-service advisors in helping teachers either to implement the existing curriculum guides or to introduce modifications in organizing their content or learning experiences;
2. Conducting study groups, workshops, work-conferences, and in-service courses addressed to improvement or revision of curriculum by changing teaching methods, developing curriculum materials, or simply introducing new ideas;
3. Curriculum revision committees working on particular subjects pertaining to particular levels;
4. Organized effort to provide consultant help and occasions for study and planning on a larger scale.

5.6.2 General Characteristics of the Organization and Procedures for Curriculum Revision

A. H. Passow (1954) summarized the general characteristics of the organization and procedures for curriculum revision or improvement as follows:

1. Widest possible participation in planning, testing, and evaluating by all persons – professional and lay – who were affected by policy and action decisions;
2. Assignment of the individual school to a more central role in curriculum activity;
3. Use of groups for initiating, planning, executing, and coordinating revision/improvement efforts;
4. Fusion of supervision, in-service education, and curriculum activity to concentrate personnel and processes for the improvement of instruction;
5. Experimentation with procedures and devices for more effective involvement;
6. Extension of kinds and uses of consultative services from many sources – central office, state / provincial department, universities and colleges of education, for example;
7. Use of cooperative research in field situations for improving practices;
8. Teamwork from many levels in cooperative enterprises; and
9. Development of more effective and widespread leadership.

An important aspect to be noted here is the need for cooperation of teachers and administrators, teacher educators, and lay groups in the revision task. Teachers must be involved in major curriculum revision work at school system level. Revision and improvement of curriculum requires better professional preparation of teachers and skilled supervision to help teachers to become knowledgeable and responsible decision makers. They should be encouraged and given facilities and opportunities to engage in action research and use results of their own inquiries to change and improve their practices and provide feedback for curriculum revision.

5.6.3 A prototype form for gathering feedback information for curriculum revision

A prototype form or check list for gathering feedback information on implementation aspects of Secondary Level Curricula, using instruments and procedures mentioned in Section 5.5.1, is given below (Mettananda, 2003):

(Instructions: All examples and suggestions for changes, deletions, or additions should be justified and given with reference to Subject, Grade, and unit / chapter / section No. of Syllabus, Teacher's Guide, Textbook, Workbook or other resource material.)

1. Subject matter, activities, assignments, exercises or experiments inappropriate to the growth level, maturity or entry competencies of the target group:
2. Subject matter or activities which can be integrated within grade, or among other grades, or with other subjects:
3. Subject areas or Methodologies needing additional explanation or resource support for implementation:
4. Successful changes in methodologies, activities, assignments, or assessment tools worthy of system-wide dissemination;
5. Successful new / innovative learning-teaching methodologies, assignments, exercises, activities or assessment tools worthy of system-wide dissemination:
6. Improvised learning teaching aids, and equipment used successfully and effectively:
7. Errors in subject matter, exercises, diagrams, tables, or charts needing correction;
8. Issues in breadth, depth, balance, scope, flow / continuity, or sequence of content:
9. Problems related to the availability of human, and material resources affecting learning – teaching process:
10. Features in overseas curricula worthy of incorporation or adaptation:

Note: Attach a description of the numbers and types / categories of teachers, and other resources used for obtaining feedback information.

5.6.4 A Checklist for Revising Curricula

A set of questions which can be used as a checklist when revising curricula is given below (ASCD, 1992):

Does the curriculum:

1. Provide a balanced core of common learning?
2. Focus on results with multiple assessments?
3. Integrate subject areas?
4. Involve students in learning?
5. Recognize and respect student diversity?
6. Develop student thinking skills?

It will be seen that most of these questions relate directly to the selection of content and activities.

Summary

The selected definitions of evaluation presented at the commencement of the Reading served as a foundation for the discussion on the major roles and functions of evaluation. The six different evaluation models presented in the Reading further strengthened our understanding of the different functions and processes associated with evaluation. We also discussed some salient aspects and special features of curriculum evaluation and its methodology. The dimensions and qualities to be examined in a curriculum, characteristics that need to be displayed in an effective curriculum evaluation were also highlighted. The model for a comprehensive curriculum evaluation programme would serve as a useful guide for the evaluation task. The activities, characteristics and organizational procedures pertaining to curriculum revision were also discussed. The items given in the prototype form and the checklist will assist the process of gathering feedback information for curriculum revision as a continuing activity.

Objectives

You are now able to

- i. Understand and discuss the definitions, major functions and roles of evaluation.
- ii. Explain the different models of evaluation and the underlying processes.
- iii. Understand the key aspects of curriculum evaluation and curriculum revision.
- iv. Develop, organize and implement a programme for evaluating and revising a curriculum.

References

- Alkin M. C. (1969) 'Evaluation Theory Development', Evaluation Comment, 1969, 2, 2–7 in Nevo, 1983.
- ASCD (1992) Association for Supervision and Curriculum Development Curriculum Handbook, Alexandria, VA: ASCD in Henson, 2002.
- Cronbach L. J. (1963) 'Course Improvement through Evaluation', Teachers College Record, 1963, 64, 672 – 683 in Nevo, 1983.
- Eisner E. W. (1979) The Educational Imagination, New York: Macmillan in Nevo, 1983.
- Glass G. V. (1969) The growth of evaluation methodology, (Research Paper No. 27), Boulder: Laboratory of Educational Research, University of Colorado, (Mimeo) in Nevo, 1983.
- Guba E. G. and Lincoln Y. S. (1981) Effective Evaluation, San Francisco: Jossey-Bass in Nevo, 1983.
- Henson Kenneth T. (2001) Curriculum Planning – Integrating Multiculturalism, Constructivism, and Education Reform New York: McGraw – Hill.
- House E. R. (1980) Evaluating with Validity, Beverly Hills, Calif: SAGE, in Nevo, 1983.
- Joint Committee on Standards for Educational Evaluation (1981) Standards for evaluation of educational programs, projects, and materials, New York: McGraw-Hill in Nevo, 1983.
- Leithwood K. A. (1981) "Dimensions of Curriculum Innovation", Journal of Curriculum Studies 13: 25-26.
- Leithwood K. A. and Montgomery D. J. (1980) "Evaluating Program Implementation", Evaluation Review Vol. 4, No. 2, April 1980, Beverly Hills, Calif.: Sage Publications.
- Lewis, Arie (ed.) The International Encyclopedia of Curriculum – Advances in Education, Pergamon Press.
- Mettananda D. S. (2003) Curriculum Development (Secondary Level), Final Report of Consultancy on Curriculum Development (Secondary Level), Second General Education Project, Ministry of Education, Sri Lanka.
- Nevo David (1983) "The Conceptualization of Educational Evaluation: An Analytical Review of the Literature", Review of Educational Research, Spring 1983, Vol. 53, No. 1, pp. 117–128.

- Passow A. H. (1954) “Organization and Procedures for Curriculum Improvement”, Review of Educational Research, 24, June 1954 in Taba, 1962.
- Provus M. M. (1971) Discrepancy Evaluation, Berkely, Calif: Mc Cutchan.
- Saylor J. Galen, Alexander William M., Lewis Arthur J. (1981) Curriculum Planning for Better Teaching and Learning, New York: Holt, Rinehart and Winston.
- Scriven M. (1967) ‘The Methodology of Evaluation’ in R. E. Stake (ed.) AERA Monograph Series on Curriculum Evaluation, No. 1, Chicago: Rand McNally: in Nevo, 1983.
- Scriven M. (1972) “ Pros and Cons About Goal-Free Evaluation”, Evaluation Comment: The Journal of Educational Evaluation 3 (1972): 1 in Saylor et al., 1981.
- Sedere M. U. (1989) An Introduction to Curriculum Evaluation, The paper presented at the UNDP / NIE joint workshop on Curriculum Evaluation, at the Institute of Fundamental Studies, Kandy, Sri Lanka.
- Stake R. E. (1967) ‘The Conference of Educational Evaluation’, Teachers College Record, 1967, 68, 523 – 540, in Nevo, 1983.
- Stake R. E. (ed.) (1975) Evaluating the Arts in Education: A responsiveness approach, Columbus, Ohio: Meril in Nevo, 1983.
- Stufflebeam D. L. (1974) Meta-evaluation (Occasional Paper No. 3), Kalamazoo: Western Michigan University, in Nevo, 1983.
- Stufflebeam D. L. (1972) ‘The relevance of the CIPP Evaluation Model for educational accountability’, SRIS Quarterly, 1972, 5, 3–6 in Nevo, 1983.
- Stufflebeam D. L., Foley W. J., Gephart W. J., Guba E. G., Hammon R. L., Merriman H.O., and Provus M. M. (1971) Educational Evaluation and Decision-Making, Itasea III: Peacock in Nevo, 1983.
- Taba Hilda (1962) Curriculum Development – Theory and Practice, New York: Harcourt, Brace & World, Inc.
- Tanner Daniel and Tanner Laurel N. (1975) Curriculum Development – Theory into Practice, New York: Macmillan Publishing Co., Inc.
- Tyler Ralph W. (1950) Basic Principles of Curriculum Development, University of Chicago Press.