

CHAPTER- 2

CONCEPTUAL FRAMEWORK

2.1 Introduction

Education aims at making children capable of becoming responsible, productive and useful members of society. Knowledge, skills and attitudes are built through learning experiences and opportunities created for learners in school. It is in the classroom that learners can analyze and evaluate their experiences, learn to doubt, to question to investigate and to think independently.

An understanding of learners, educational aims, the nature of knowledge, and the nature of the school as a social space can help us arrive at principles to guide classroom practices. Conceptual development is thus a continuous process of deepening and enriching connections and acquiring new layers of meaning. Alongside is the development of theories that children have about the natural and social worlds, including themselves in relation to others, which provide them with explanations for why things are of the way they are, the relationships between causes and effects, and the bases for decisions and acting. Attitudes, emotions and values are thus an integral part of cognitive development, and are linked to the development of language, mental representations, concepts and reasoning.

As children's metacognitive capabilities develop, they become more aware of their own beliefs and capable of regulating their own learning.

In recent years, there has been a growing concern for improving the quality of teaching-learning process at secondary and higher secondary level. However the effectiveness of this process of teaching and learning is marked by the outcome of the evaluation.

There are various ways of finding the outcome- assessment, evaluation, testing and measurement. People often get confused among these terms. Nevertheless, these

words are not synonyms. The meaning of these terms will become more clear by the following description-

2.2 Measurement, Assessment and Evaluation

Measurement is used to measure abilities and levels of attainment by students in areas such as reading, writing, Mathematics, Science and so on. Traditionally, attention focuses on whether assessments are reliable and valid. In practice, educational measurement is largely concerned with the analysis of data from educational assessments or tests. Typically, this means using total scores of students on assessments, whether they are multiple choice or open-ended and marked using marking rubrics or guides.

‘Assessment defines what students regard as important, how they spend their time and how they come to see themselves as students and then as graduates...If you want to change student learning then change the methods of assessment’ (Brown, et al., 1997).

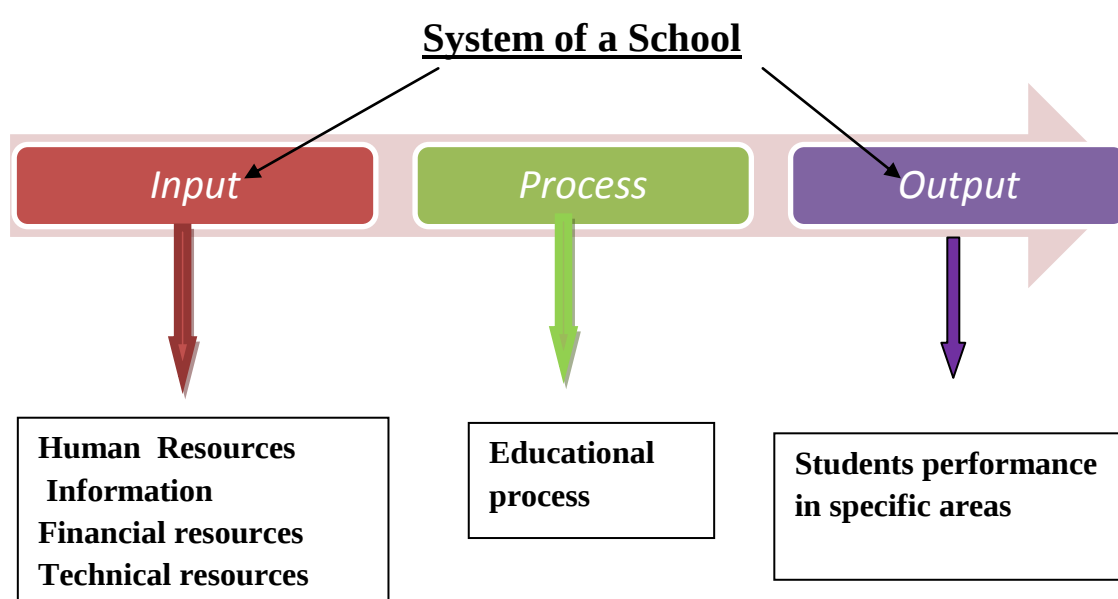
Educational assessment is the process of documenting, usually in measurable terms, knowledge, skills, attitudes and beliefs. Assessment can focus on the individual learner, the learning community (class, workshop, or other organized group of learners), the institution, or the educational system as a whole.

Evaluation plays an important role in the teaching learning process. It encompasses quantitative as well as qualitative performance of individuals. It provides direction to both teachers as well as students to proceed in a systematic manner. It is a very well known fact that the evaluation practices carried out in schools aim at measuring the knowledge and understanding outcomes of learners.

The *Dictionary of Education (1982)* explains the concept of evaluation and assessment as, Evaluation is often used interchangeably with assessment. This is because there is a considerable overlap in their meanings. Both involve measurement and procedures to find out the outcome of the learning process.

It is a very well known fact that the evaluation practices carried out in schools aim to measure the knowledge and understanding outcomes of learners, neglecting the evaluation of skills and higher mental abilities. While one of the major aim of school education is the all round development of the child, least attention is paid to the educative process involved and to the assessment of students' personal development. The major focus is on product rather than the process. The process followed in the system of a school is depicted in the following figure:

Figure 2.1: System of a School



The *National Policy on Education (1986)* and the *Programme of Action (1992)* followed by the *National Curriculum Framework of School Education (1986)* and (2000) reiterated the need for developing the personal and social qualities in learners. They stressed the point that the evaluation should be comprehensive in nature, wherein all learning experiences pertaining to scholastic, co-scholastic and personal and social qualities are assessed.

2.3 Evaluation-Concept and Nature

Ralph Tyler (1950) defines evaluation as “**the process of determining to what extent the educational objectives are being realized**”. So, evaluation is a means of realizing the extent to which we have been successful in imparting true education.

Evaluation is a means of realizing the extent to which we have attained the desired outcome. Evaluation is an indispensable part of the educational process as some form of assessment is necessary to determine the effectiveness of teaching learning processes and their assimilation by learners.

The present evaluation system is said to be mechanical, stereotyped, traditional and unable to measure the child in a comprehensive way.

Evaluation is goal directed, and educational outcomes are judged in terms of goal attainment. Every educational programme should aim for the all round development of the personality of the child. Therefore, the learning experiences provided in the school should contribute toward the achievement of the desired goals. A teacher, while deciding about the related learning experience should see both scholastic and co-scholastic outcomes as desirable behavioural outcomes of that programme.

Realizing the importance of evaluation in the teaching –learning process various committees and commissions gave their recommendations to improve the quality of evaluation.

Evaluation is a continuous process which includes four major processes has been depicted in the following figure:

Figure 2.2: Process of Evaluation



The process of evaluation includes:

- **Analysis** of students' characteristics, previous knowledge, resources available to learners for completion of assignments etc.
- **Designing** instructional strategies such as lecture, projects, presentations, activities, tasks exercises and creating a detailed course outline.

- **Development** includes construction of a detailed syllabus, course material, traditional exams, rubrics for question papers etc.
- **Implementation** means completion of the course as designed by the learners. Learners are assessed accordingly by the designed assessments. Instructor monitors, guides, and facilitates as learners complete the course.

The scope of evaluation in schools extends to almost all the areas of learners' personality development. It should include both scholastic and co-scholastic areas, i.e. it should be *comprehensive* in nature. This is in line with the goals of education. Evaluation is continuous and reveals the strengths and weaknesses of learners more frequently, so that the learners have better opportunity to understand and improve themselves. It also provides feedback to the teachers for modifying their teaching strategies. Obviously, the efforts of CBSE to provide a leadership and pioneering role in implementing CCE is a major breakthrough which attempts to elevate the status of the schools as equal partners of the Board in assessing the attainment levels of the learner for public consumption through a separate independent certificate issued by the schools under the directive of the Board.

2.4 Types of Evaluation

Evaluation is divided into two categories: Formative and Summative.

Summative Evaluation - Summative evaluation is generally carried out at the end of a course or project. It is done to check the final status of the students. In an educational setting, summative evaluation is typically used to determine the extent to which the examinee has mastered the knowledge and skills associated with course. It measures or '*sums-up*' how much a student has learned from the course. It is usually a graded test, i.e., it is marked according to a scale or set of grade.

Formative Evaluation- Formative evaluation is generally carried out throughout a course or project. This is conducted to monitor the progress of students by getting feedback. Formative evaluation is also referred as "educative assessment."

Formative assessment is a tool used by the teacher to continuously monitor student progress in a non-threatening, supportive environment. It involves regular descriptive feedback, a chance for the student to reflect on the performance, take advice and improve upon it. It involves students' being an essential part of assessment from

designing criteria to assessing self or peers. If used effectively it can improve student performance tremendously while raising the self esteem of the child and reducing the work load of the teacher.

Table 2.1: Difference between Formative and Summative Evaluation

Characteristics	Formative	Summative
Purpose	To monitor progress of the students	To check final status of the students by getting feedback
Content Focus	Detailed- narrow	Broad-General scope
Examples	Assignments, observation, interview, anecdotes	Common assessments like Tests and exams (half-yearly)
Frequency	Occurs on a continuous basis (daily)	Occurs at a particular point of time to determine what
Role of students	Active involvement	Passive involvement
Means of testing	Quiz, interview, conversation, visual and oral testing, projects,	Assessment in the form of paper-pen test mostly.
Grading	Scored but graded	Grades and marks are given

2.5 Views of Different Committees and Commissions on Evaluation

A number of National Committees and Commissions in the past have consistently made recommendations regarding reducing emphasis on external examination and encouraging internal assessment through School-Based Continuous and Comprehensive Evaluation. All of them have felt that the scope of evaluation in schools should extend to almost all the areas of a learner's personality development.

The *University Grants Commission committee on 'Examination Reform' (1986)* had recommended the desirability of periodically testing students. It has suggested that the work of the students should be regularly evaluated and some credits can be given for it.

Report on the *CABE committee (1992)* has also referred to the provisions of NPE with regard to evaluation process and examination reforms and also suggested 'continuous

and comprehensive internal evaluation of the scholastic and non-scholastic achievement of the students.

The need for Continuous and Comprehensive School-based Evaluation has been reiterated over the last few decades. *The Education Commission Report (1966)* observed 'On the completion of the course, at the end of the lower or higher secondary stage, the student should receive a certificate from the school also giving the record of his internal assessment as contained in his cumulative record. This certificate may be attached to that given by the Board in connection with the external examination'. It further adds, 'This internal assessment or evaluation conducted by the schools is of greater significance and should be given increasing importance. It should be comprehensive, evaluating all those aspects of students' growth that are measured by the external examination and also those personality traits, interests and attitudes which cannot be assessed by it.'

“Learning without Burden”- *A Report of the National Advisory Committee (1993)* has stated that: “ Board examination, taken at the end of Class X and XII, have remained rigid, bureaucratic, and essentially uneducative...’

Position Paper on Aims of Education(2005) states, Excellence in diverse areas should be recognized and rewarded. And it is children's responsiveness to what is taught rather than just their capacity to retain it that should be the focus of evaluation.

Accordingly, *National Curriculum Framework (2005)* stated- “Each school should evolve a flexible and implementable scheme of CCE, primarily for diagnosis , remediation and enhancing of learning. The scheme should take in account the social environment of the school and the facilities available in school”. It further adds that the evaluation should emphasize on the diagnosis and remediation aiming at ensuring the mastering level. The performance of students related to scholastic areas should be graded on a nine point scale. Attributes pertaining to the Co-scholastic areas to be assessed through observation, checklists and rating scales which need to be reported using five point direct grading.

RIE (2009) states that students up to std VIII should not be made to appear for any board examination from the year 2010-11, a scheme of CCE to be implemented from std I to VIII.

All the committees and commissions advocated for Continuous Comprehensive Evaluation and school based evaluation. What is the reason behind the failure of this assessment is a matter of concern.

So where does the evaluation system fail?

- When it focuses on evaluation of learning rather than evaluation for learning.
- Evaluation being limited in scope and leads to teaching for assessment rather than teaching for learning.
- Ignoring individuality of the learner.
- Being uneconomical and preventing teachers from developing teaching skills.
- If the evaluation system does not fit the current needs and demands of the knowledge and information based society.
- Unable to develop problem solving skill and creative thinking skill among the learners.

2.6 The Present Examination and Evaluation System

Examination has pivotal role to play in the education process. They are indispensable part of the educational process as some form of evaluation is necessary to determine the effectiveness of the imparting of knowledge by teachers and its assimilation by students. The evaluation may lead to refinement of individuals and thus of society. So the strength and success of an educational system depends on the examination system.

‘A major goal of examination should be to make evaluation a continuous process aimed at helping the student to improve his level of achievement rather than at ‘certifying’ the quality of his performance at a given moment of time.’ *

* R.K Raghuram (2008), Recommendations of Kothari Commission, Crescent Publishing Corporation: New Delhi, P. 20

Examinations as they are conducted today do not measure students potential in the real sense. Generally examinations cover only a small fraction of the course that the students learn over a period of one year. Nor do they provide the application of multiple techniques of evaluation like oral techniques, observations, projects, assignments etc as they stick only to the use of written tests. The present system of evaluation at school stage suffers from inadequacies. In order to remove these inadequacies, the concept of continuous and comprehensive evaluation practices have been introduced in the education system and now gradually different boards all over India are trying to follow the pattern of evaluation. CBSE schools have been following continuous and comprehensive evaluation practices since a long time but now Gujarat board has also recently introduced the scheme of such type of evaluation at secondary level.

2.7 Continuous and Comprehensive Evaluation

It was made mandatory in the National Policy on Education, 1986 to introduce the concept of Continuous and Comprehensive Evaluation in the teaching-learning process to challenge the traditional system of evaluation.

Evaluation is an indispensable part of teaching-learning process. But our Indian education system mainly focuses only on summative evaluation. As a result exams have become a phobia for most of the students. Thus CCE came into existence. ‘CCE’ stands for Continuous and Comprehensive Evaluation. CCE has been made compulsory by Human Resource Development minister Kapil Sibal to decrease the accumulated stress of board exams on the students and to introduce a more uniform and comprehensive pattern in education for the children all over the nation.

Gujarat Secondary and Higher Secondary Board (GSHSEB) has made new framework for CCE practices. CCE which is called ‘School Based Continuous Formative Evaluation’(SCF) has been implemented from June 2011 in class IX at secondary level in the schools affiliated to Gujarat Secondary and Higher Secondary Board (GSHSEB). From June 2012 they will be starting it in class X also.

Continuous and Comprehensive Evaluation refers to a particular process of evaluation which is school-based and aims at all-round development of the students. This process

includes continuity of testing with reasonable intervals. It also covers various aspects of curricular and co-curricular so as to help the students.

Continuous and Comprehensive evaluation aims at reducing the workload of the students and to improve overall skills and abilities of the students. As a part of this new system, students' marks are replaced by grades and are evaluated through a series of factors along with academics. CCE focuses on Scholastic as well as co-scholastic aspects of the students. These co-scholastic areas are:

- | | |
|-----------------------|-----------------|
| • Cleanliness | • Music |
| • Discipline | • Dance |
| • Cooperation | • Painting |
| • Regularity | • Health |
| • Emotional Stability | • Initiative |
| • Sports/game | • Art education |

Continuous and Comprehensive Evaluation (CCE) refers to a system of school-based evaluation of students that covers all aspects of students' development.

It is a developmental process of assessment which emphasizes on two fold objectives. These objectives are continuity in evaluation and assessment of broad based learning and behavioural outcomes on the other.

In this scheme the term '*continuous*' is meant to emphasize that evaluation of identified aspects of students 'growth and development' is a continuous process rather than an event, built into the total teaching-learning process and spread over the entire span of academic session. It means regularity of assessment, frequency of unit testing, diagnosis of learning gaps, use of corrective measures, retesting and for their self evaluation.

The second term '*comprehensive*' means that the scheme attempts to cover both the scholastic and the co-scholastic aspects of students' growth and development. Since abilities, attitudes and aptitudes can manifest themselves in forms other than the written word, the term refers to application of variety of tools and techniques(both

testing and non-testing) and aims at assessing a learner's development in areas of learning like :

- Knowledge
- Understanding/Comprehension
- Applying
- Analyzing
- Evaluating
- Creating

In order to have Continuous and Comprehensive Evaluation, both Scholastic and Co-scholastic aspects need to be given due recognition. Such a holistic assessment requires maintaining an ongoing, changing and comprehensive profile for each learner that is honest and encouraging.

Figure 2.3: Classification of Scholastic and Co-Scholastic Assessment

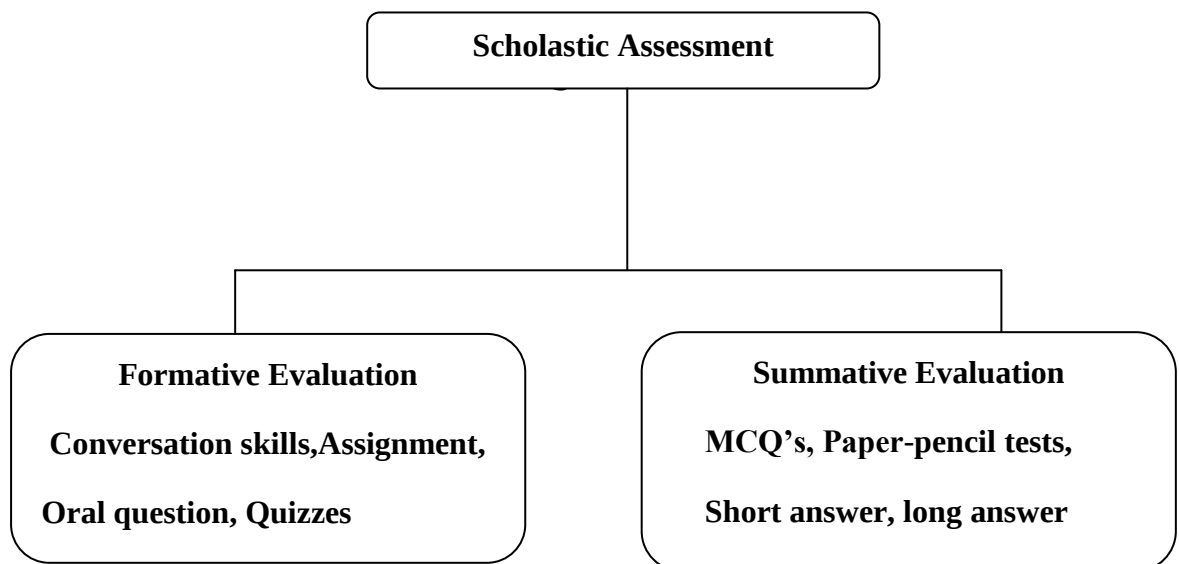
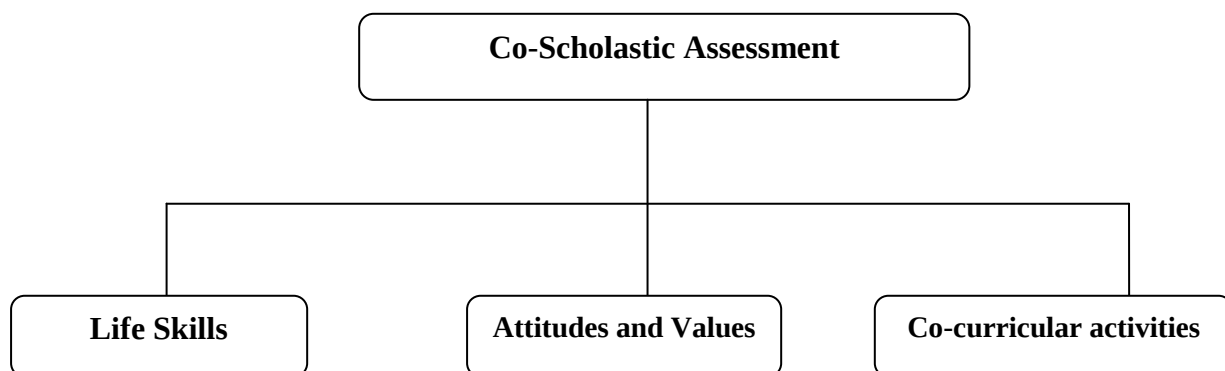


Figure 2.4: Co- Scholastic Areas



The co-scholastic assessment is further elaborated in the following graphical representation according to the various aspects under life-skills, attitudes and values and co-curricular activities.

Figure 2.5: Life Skills

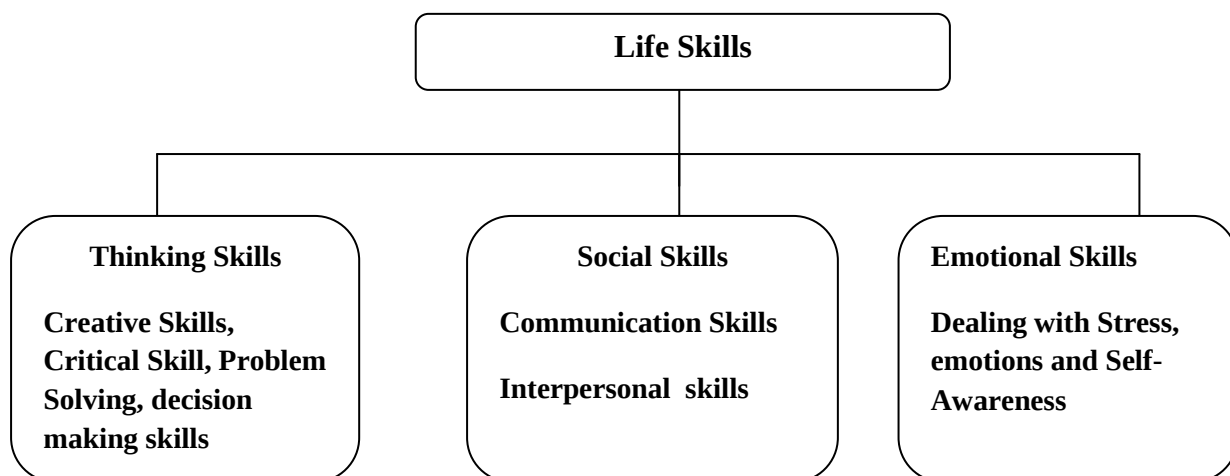


Figure 2.6: Attitudes and Values

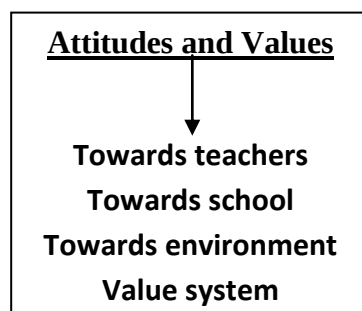
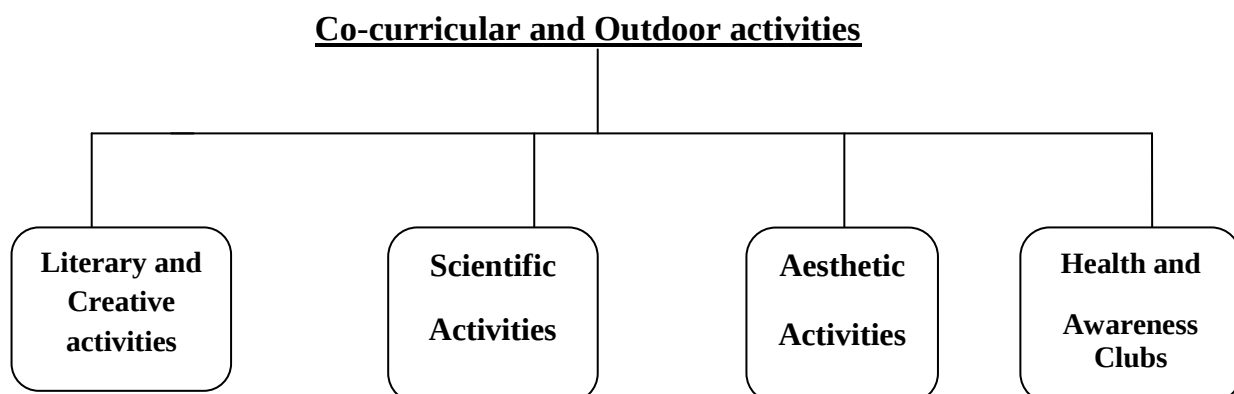


Figure 2.7: Co-curricular activities



2.7.1 Objectives of Continuous and Comprehensive Evaluation

As per the child centered approach, Continuous and Comprehensive Evaluation reflects the concern for the children and their all round development. As stated in the Teachers manual on School based Assessment class IX and X (2009) the objectives of the scheme are:

- To help develop cognitive, psychomotor and affective skills.
- To lay emphasis on thought process and de-emphasize memorization.
- To make evaluation an integral part of teaching-learning process.
- To use evaluation for improvement of students' achievement and teaching – learning strategies on.
- To take up regular diagnosis followed by remedial instruction.

- To use evaluation as a quality control device to maintain desired standard of performance.
- To determine social utility, desirability or effectiveness of a programme and take appropriate decisions about the learner, the process of learning and the learning environment.
- To make the process of teaching and learning a learner-centered activity.

The major emphasis of CCE is on the continuous growth of students ensuring their intellectual, emotional, physical, cultural and social development and therefore it is not merely limited to assessment of learner's scholastic attainments. It uses assessment as a means of motivating learners in further programmes to provide information for arranging feedback and follow up work to improve upon the learning in the classroom and to present a comprehensive picture of a learner's profile.

2.7.2 Types of Assessment Tools and Techniques for CCE

The tools for formative assessment in scholastic domain are observation, oral test, assignments, practical experiments, quizzes, tests, homework/classwork and group work. The tools for summative assessment in scholastic domain are multiple choice questions, short answer type and long answer type , descriptive questions at term end. According to *Teachers Manual on School Based Assessment Class IX and X(2009)* , following techniques and tools of evaluation needs to be used by the teachers for evaluating different aspects of the students:

- **Observation**

Information can be gathered about children in ‘natural settings.’ Some are about the learners in the course of teaching. Others are based on planned and purposeful observation of students during activities and tasks.

- **Checklist**

Checklists are systematic ways of recording specific behavior of a child in the class-room.

- **Assignments**

It provides students with a theme based task which has to be completed for acquiring some information. It can be based on contexts outside the textbook.

- **Portfolios**

It is a collection of students work over a period of time. It could be day-to-day work or a selection of the learners' best piece of work.

- **Rating scales**

These can be used to record the quality of students' work and then judging the quality against the specified criteria.

- **Anecdotes and cumulative records**

They provide observational narrative records of significant incidents in a child's life.

- **Projects**

These are undertaken over a period of time and generally involve collection and analysis of information. Projects are useful in theme-based learning.

- **Photographs**

Photographs provide documentation of children's experiences, while they are doing group work. It could also be of finished products, project models etc.

- **Audio/video recordings**

Specific situation over a time span to cover important aspects can be recorded and analyzed and recorded later.

- **Quiz, games and acts**

These can also be organised to assess children from time to time.

2.7.3 Need of Continuous and Comprehensive Evaluation

The school based CCE system has been recommended by various commissions and committees due to its being child-centered, school-centered and multi-dimensional.

The system is needed to

- Reduce stress
- Make evaluation comprehensive and regular
- Provide tools for diagnosis and remediation
- Provide learners with greater skills

Thus we can say that CCE when implemented can reduce the stress on students and also bring about qualitative change in the education process which is the need of the day.