

# **Chapter - 1**

## **Conceptual Framework**

# CHAPTER I

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## CONCEPTUAL FRAMEWORK

### 1.0 Introduction

The essence of education is concentration of mind not only to collect the facts, information and merely cramming figures but to provide knowledge for problem solving, personality development and character building (Vivekananda, 2013). The sense of correct decision-making, rational and critical thinking according to the situation, sense of awareness about the society, skills, values for life, right attitude towards society and knowledge are the attributes developed and enhanced by means of education. Such attributes would lead to all-round development of the learners for facing the real life challenges. The education system can address development of these aspects in the learners through well planned curriculum. The curriculum at different levels should develop positive thoughts, right attitudes and values in the learners.

School curriculum plays a vital role in developing these characteristics in the students. The school curriculum gradually develops these attributes through a planned curriculum at different levels i.e. primary secondary and higher secondary sections of the school. The curriculum is based on the development of socially acceptable individuals. Thus the planning of the curricular aspects should be based on the needs of the society. So with the changing needs of the society curricular aspects like the subject specific topics, evaluation patterns, organisation of co- curricular activities etc. should be restructured. One such reform in the secondary education is the introduction of CCE (Continuous and Comprehensive Evaluation) in the secondary classes. CBSE (Central Board of Secondary Education) introduced CCE for the first time in the year 2000 for class IX and X to use it as a quality control device for maintaining the desired standard performance of the students. CCE aimed at assessment of students' behaviour related to scholastic aspects along with desirable behaviour related to co- scholastic aspects like life skills, attitudes, values, co-curricular and physical health activities. This aim of CCE was in accordance with the objectives of secondary education set by the various educational commissions. CCE also emphasises on development of values and personality as mentioned by secondary education commission (1952-53). CCE lays emphasis on development of proper interests, attitudes and values and the building up of essential skills like independent study, capacity to think and judge for oneself in the

secondary school students like the education commission (1964-66). CCE draws its objective of developing life skills, such as problem-solving, critical thinking, communication, self-awareness, coping with stress, decision-making, creative and generative thinking, interpersonal relationships and empathy through activities suiting the culture of the society from National Curriculum Framework for School Education (NCFSE, 2000). CCE has indicated the importance of life skills to enable the learners' personal growth and to equip them psychologically to cope with the rapid changes taking place in all the spheres of life as explained by NCFSE (2000). Thus, the aim with which the CCE was introduced by CBSE is aligned with the recommendations given by educational commissions and curricular frameworks made at national level for the secondary school students.

Continuous and Comprehensive Evaluation (CCE) refers to school-based evaluation of scholastic and co-scholastic aspects of the students that covers all the aspects of a student's development. According to the CCE guidelines teaching of the scholastic subjects should be carried out by using learner centre approach and co-scholastic aspects should be assessed based on the broad guidelines given in form of indicators. Assessment of these aspects by an external examination seems inappropriate and difficult. External examination may assess the knowledge that may be either cognized or rote memorized by the learner but may fail to assess higher order skills like reasoning and analysis, lateral thinking creativity and judgment. Moreover it is incapable, to create a learner centred learning environment and induce an in-ordinate level of anxiety and stress. (NCF-2005 Position paper on examination reforms)

The anxiety and stress among the secondary class students is higher due to the higher level of energies generated due to the physiological and psychological developmental stage of their life. Thus it becomes imperative to channelize their energies to develop desired life skill, attitudes, values and other skills required by them to survive in the real world. This implies that the education at school should not only focus on cognitive development but also on the development of psychomotor and affective domain, which in turn means that the co-scholastic aspects should also be given significance like the scholastic aspects. For providing such opportunities the school needs to design teaching learning process and activities that would involve the all-round development of the students. Then the evaluation criteria should be also based on the type of activities and teaching learning process used. School based evaluation plays a vital role in assessing the development of these desired characteristics in the

students.

Though school based evaluation or continuous and comprehensive evaluation seems to encompass the evaluation of most of the aspects of students' development, it is necessary to timely support this system of evaluation with required inputs. To provide this support, it is necessary to find out how the system is functioning presently. It is necessary in this direction. A survey about the implementation of CCE with respect to various scholastic and co-scholastic aspects may be a guiding step to further enhance its implementation. For this purpose it is necessary to know the concept of CCE, its objectives, its importance and aspects associated with it.

The Continuous and Comprehensive Evaluation refers to a school-based evaluation of students that covers all the aspects of a student's development. Continuous means regular assessments, frequency of unit testing, analysis of learning gaps, applying corrective measures, retesting and giving feedback to teachers and students for their self-evaluation etc. Comprehensive on the other hand attempts to cover both the scholastic and the co-scholastic aspects of a student's growth and development with both these aspects of the evaluation process being assessed through Formative and Summative Assessments. It emphasizes on two fold objectives: continuity in evaluation and assessment of broad based learning (CBSE Teachers' Manual, 2010).

CCE aims at reducing the stress of the students by identifying learning progress of students at regular time intervals on small portions of content. It employs a variety of remedial measures of teaching based on learning needs and potential of different students. It also aims at discontinuing the use of negative comments on the learner's performance and encouraging learning through the use of variety of teaching aids and techniques. Students' active involvement in the learning process and encouragement of specific abilities of students in the co-curricular areas is also one of the prime focus of CCE. For implementing CCE, variety of tools, assessment criteria are to be employed. For understanding this the learning styles and abilities of the students and provisions of opportunities for improvement is vital (CBSE Teachers' Manual, 2010).

The significance of CCE in the all-round development of the students have been suggested by many educational commissions and committees.

### **1.1 Policy recommendations on School Based Evaluation (SBE)**

All efforts at curriculum renewal comes to standstill if they cannot involve a proper system of evaluation and examination system embedded in school system. The

evaluation may be both school based (internal) and board based (external) or any one of them but the educational commissions suggest a combination of both the type of evaluation. The evaluation at school may be done at the end of the academic year i.e. summative evaluation or during the teaching learning process i.e., formative evaluation. The evaluation record of both the summative and formative evaluation may be counted as the cumulative record of students' achievement. Continuous and Comprehensive internal evaluation safeguards the abuse of the evaluation system [Report on the Committee for Review of NPE-1986-recommendation brought out by Ramamurti, 1990]. Only evaluating the students based on external examination like board examination is rigid, bureaucratic and uneducated and it should be replaced by the evaluation, which promotes learning without burden, reduces rote memorization and reduces stress and anxiety in the students (Ministry of Education,1992). Continuous and comprehensive internal evaluation of the scholastic and non-scholastic achievement of the students should be carried out by the schools (CABE Committee, 1992). The scope of continuous and comprehensive evaluation extends to almost all the areas of learners' personality development like frequent assessment of the students strengths and weaknesses in the scholastic and co-scholastic areas, providing them a better opportunity to understand and improve oneself and provides the teacher with the feedback to modify their teaching (NCF, 2005). The Comprehensive and continuous evaluation should ensure child's understanding of knowledge and his or her ability to apply the same. Building up child's knowledge, potential and talent; learning through activities, exploration and discovery in a child friendly and child-centred manner; making the child free from fear, trauma and anxiety and helping the child to express views freely [The Right of Children to free and Compulsory Education Act 2009]. The educational commissions and curriculum frameworks have given some important recommendations for exam reforms, which are being described below.

### **1.1.1 Secondary Education Commission (1952-53)**

The subject of Examination and Evaluation occupies an important place in the field of education. It is necessary for parents and teachers to know from time to time how the pupils are progressing and what their attainments are at any particular stage. It is equally necessary for society to assure itself that the work entrusted to its schools is being carried on satisfactorily and that the children studying there are receiving the right type of education and attaining the expected standards. This kind of check up of

the school work is essential in the interests of all concerned-pupils, teachers, parents and the public. Examinations are the usual means adopted for this purpose. Commenting upon the exam pattern the commission expressed the importance of assessing the emotional and social development of the child, his physical and mental health, his social adjustment rather than just focussing on intellectual pursuits of the student. Moreover when only the internal and external exams are used cognitive abilities of the student, the teaching learning process also remains constrained to scoring well in external exams rather than develop those capacities of the pupil which are not tangible. With reference to this CCE system made by CBSE, has considered social, emotional and thinking skills are assessed for each and every student. The commission also highlighted the need to maintain day to day records of the child to find out his or her vocational interests. CCE provides a scope for work education in which the vocational skills can be identified apart from this the day to day record has been emphasised in CCE as the maintenance of anecdotal record, which is more focussed on the behaviour of the student rather than the vocational interests and vocational skills exhibited by him or her. Further following recommendations were given by the commission for improvement of examinations and assessments in the schools. The following were the recommendations given by the commission for reforms in examinations.

Summary of recommendations given by secondary education commission( Ministry of Education, 1952-1953) are as follows

- i. The number of external examinations should be reduced and the element of subjectivity in the essay-type tests should be minimised by introducing objective tests and also by changing the type of questions.
- ii. In order to find out the pupil's all around progress and to determine his future, a proper system of school records should be maintained for every pupil indicating the work done by him from time to time and his attainments in the different spheres.
- iii. In the final assessment of the pupils due credit should be given to the internal tests and the school records of the pupils.
- iv. The system of symbolic rather than numerical marking should be adopted for evaluating and grading the work of the pupil in external and internal examinations and in maintaining the school records.
- v. There should be one public examination at the completion of the Secondary

school course.

- vi. The certificate awarded should contain besides the results of the public examination in different subjects, the results of the school tests in subjects not included in the public examination as well as the gist of the school records.
- vii. The system of compartmental examinations should be introduced at the final public examination.

As mentioned above CCE also aimed at removing much subjectivity and including more objective questions hence it had given 50% weightage for the MCQ in the external exams. In the final result 40% weightage was given to the scores of internal tests which was called as formative assessment grades. The grades of the school tests are not separately written in the result of the public examination but finally both are converted into one grade based on the weightage assigned to the formative (internal) and summative (external) exams. Work done by the student in different spheres like co-scholastics and co-curricular were to be recorded and the respective grades were placed in the final result as per the CCE pattern. The final public examination was two compartments the two summative exams were taken for the students of Class IX and class X, wherein the first summative exams were checked at school while the second summative papers were assessed by the teachers assigned by CBSE. Thus CCE encompassed all the suggestions reflected in the recommendations of the secondary education commission.

### **1.1.2 Education Commission (1964-66)**

The Education Commission, after reviewing these defects at the secondary education stage, recommended a new approach to school evaluation and made a number of concrete proposals for the improvement of the external examination and the methods of internal assessment. The New Concept of Evaluation was described as a continuous process and an integral part of the total system of education. It was suggested that the new concept of evaluation intimately related to educational objectives, pupil's study habits, teacher's methods of instruction and to be used as a means to improve achievement. Thus, different techniques of evaluation were suggested to be used for student evaluation. The tools and techniques suggested were observation, oral tests and practical exams apart from written exams. Such techniques were to be used for assessing the personality traits, interests and attitudes of the students which cannot be assessed by external exams. The commission suggested that internal assessment of the

above mentioned attributes of the child, to be built in as a part of educational program of the school to improve the student by giving the feed back in descriptive terms, rather than just to certify the student by giving a numerical value. The use of standardised tests for such internal assessments wherever required was also suggested by the Education commission. The need for developing different types of evaluation tools for improving internal assessment such as interest inventories, aptitude tests, rating scale by experts, training the teachers to make such simple tools was strongly emphasised. The use of different standardised tools for internal assessment was suggested to overcome the shortcoming of differential internal assessment results in different institutions, which were not comparable. Moreover it was suggested that if standardised tools are not used for internal assessment then the results of both internal and external tests should not be combined since the purpose and techniques of the two evaluations are different and separate result for both tests should be given at the end of the course. In the CCE scheme given by CBSE some of the aspects of this new concept of evaluation given by the education commission like assessing the personality traits, attitudes and interests of the students had been included using descriptive indicators to describe them. CCE used different types of tools and techniques for assessments like oral testing, observation, practical exams, etc was also one of the aim of CCE. However the use of standardised tools for internal assessment had not been suggested in CCE.

### **1.1.3 National Policy on Education 1986 (NPE, 1986)**

Assessment of performance is an integral part of any teaching learning process and examinations should be conducted to bring about qualitative improvements in process (MHRD ,1986). Further following points for the improvement of teaching learning process has been emphasised for examination reforms by NPE,1986.

- i. The elimination of excessive element of chance and subjectivity
- ii. The de-emphasis of memorisation
- iii. Continuous and comprehensive evaluation that incorporates both scholastic and non- scholastic aspects of education, spread over the total span of instructional time
- iv. Effective use of the evaluation process by teachers, students and parents
- v. Improvement in the conduct of examination
- vi. The introduction of concomitant changes in instructional materials and methodology

- vii. Instruction of the semester system from the secondary stage in a phased manner and
- viii. The use of grades in place of marks.
- ix. The introduction of concomitant changes in instructional materials and methodology

The above recommendations were stated in NPE 1986, to reduce the predominance of external examinations and to implement a proper institutional level evaluation of students. It also emphasised on the setting up of the guidelines for the examining bodies with a scope of some flexibility to innovate and adapt the framework to suit the specific situations.

CCE also aimed at reducing the predominance of the external exams and provision of flexibility in its guidelines to suit the local needs of the schools. With these intentions CCE gave 40% weightage to formative assessment. In the formative assessment teachers were allowed to utilise complete flexibility in using different tools or techniques of their choice. CCE also gave flexibility in organising community participation programs and vocational courses as per the local needs of the area where the school was located. Apart from that continuity in evaluation, de-emphasis of memorisation, using grading pattern were some aspects in alignment with NPE, 1986 recommendations

#### **1.1.4 National Curriculum Framework for School Education (NCFSE, 2000)**

The national curriculum framework for school education (NCFSE, 2000) emphasised on making exams more reliable and valid for improving the examination system. It also highlighted that evaluation should be made a continuous process to help the student to improve his level of achievement rather than just 'certifying' the quality of his performance at a given moment of time.

The NCFSE 2000 has made following propositions for improving evaluation in schools

- i. Adequate emphasis to be given to formative and summative evaluation covering scholastic and co-scholastic abilities
- ii. Comparison of the student's performance with reference to his/her own self, criterion set by the teacher and the performance of his/her peer group
- iii. Detailed stage-wise evaluation procedures starting from the pre-primary to the higher secondary stage of schooling.
- iv. Laid stress on mastery learning approach by using diagnosis and remediation for

- weaker students and enrichment programme for the brighter ones.
- v. Use of different methods of grading scholastic and co-scholastic areas and also school based and public examinations.
- vi. Application of different point, grade systems for different stages of school education
- vii. Encouraged use of portfolios for record keeping and reporting
- viii. Urged use of both self and peer appraisal as vital component of the continuous and comprehensive evaluation
- ix. Proposed the introduction of semester system at secondary school stage
- x. Conduct of periodic achievement surveys in different subject areas at every terminal stage of schooling
- xi. Favoured the use of modern technology in evaluation.

The framework mentioned the above points for improving evaluation system in schools with the intend to make the system transparent by taking parents and community into confidence, reduce inter learner comparisons, made positive communication of the evaluation outcomes to the students. This would make the students ready for continuous evaluation rather than thinking it to be an imposition. The framework also aimed at making the students competent for self evaluation right from the early years and to restore people's faith in evaluation practices conducted in school (NCFSE, 2000).

Similarly CBSE under the CCE scheme also aimed at conducting formative and summative evaluation for the scholastic co-scholastic abilities. Criterion based evaluation set by the teacher, use of diagnosis and remediation for weak students, use of different methods for grading different methods for scholastic and co-scholastic areas, inculcation of self and peer appraisal qualities in the students and use of modern technology for evaluation were being emphasised by CCE scheme of evaluation in accordance with the suggestions given by NCFSE, 2000. But the aspects like detailed stage-wise evaluation procedures starting from the pre-primary to the higher secondary stage of schooling, use of enrichment programme for the brighter ones, use of portfolios for keeping record about the student and carrying out of periodic achievement surveys in different subject areas at every terminal stage of schooling suggested by NCFSE has not been highlighted by CCE scheme. Thus, it can be said that most of the aspects recommended by NCFSE was incorporated in the CCE scheme.

### 1.1.5 National Curriculum Framework 2005

NCF 2005 lays emphasis on the following points regarding the evaluation in schools

- i. The middle term should have school based assessment such that the internal assessment becomes more credible.
- ii. Evolution of flexible and implementable scheme of continuous and comprehensive evaluation by every school.
- iii. Evaluation should focus on diagnosis and remediation and enhancement of learning in the students.
- iv. Teachers should be trained to pick up the strengths and weakness of the students and they should be graded upon them.
- v. Use of varied modes of assessment like oral testing, open book exams, group work evaluation to shift the focus of the exams from testing memory to testing higher levels of competencies such as interpretation, analysis and problem-solving skills.
- vi. Since the nature of learners and the quality of teaching is varied so it is irrational to expect the same level of competence from all the students studying at the same level or it is illogical to use the principle of "one-exam-fits-all".
- vii. Use to assess higher level competencies through better paper setting and providing standard and desirable information to candidates (such as periodic tables, trigonometric identities, maps and historical dates, formulae, etc.)

NCF has emphasised on use of oral testing, open book exams, group work evaluation to shift the focus of the exams from testing memory to testing higher levels of competencies such as interpretation, analysis and problem-solving skills, diagnosis and remediation and enhancement of learning in the students, which has been emphasised by the CCE scheme made by CBSE also. NCF recommended that "one-exam-fits-all" philosophy should be abolished; hence student should be tested using different type of tests. This has been emphasised by CCE, so practical work, assignments, oral tests, research projects, open book exams, has been included.

The above description of the recommendations of various commissions, committees and curriculum frameworks on education shows that the CCE has drawn its foundation from those recommendations. But it was imperative to find out the implementation of the CCE in the schools and the challenges faced therein.

The national focus group paper on examination reforms 2006 has further recommended the strengthening of School-based Assessment in the medium term since it was established to reduce stress on children, make evaluation comprehensive and regular, provide space for the teacher for creative teaching and provide a tool for diagnosis and for producing learners with greater skills. It also suggested to make CCE scheme simple, flexible, and implementable in any type of school from the elite one to a school located in rural or tribal areas. Evolution of teacher owned schemes by the teachers of all the schools for implementation of CCE, honest internal assessment by the teachers, 20% weightage to be given to CCE for class X were the other suggestions of the focus paper. Apart, from that the paper also emphasised on inclusion of some components of SBA in the School leaving certificate issued by the state boards, performance should be shown in terms of grades in each area appropriate to the stage of schooling, issuing a certificate about student's performance in all areas of the school along with board certificate were the other suggestions in the focus paper. The paper also highlighted that if the schools do not have science laboratories to conduct the practical exams, the farce of school-assessed practical must end and science marks should be given entirely on the basis of theory exams, (which would have to then include a section on planning experiments). However it was indicated that such a practice would harm the development of experimentation skills in the students and would later affect the country's scientific manpower. The suggestions of the focus paper implies that the weightage to be given to school based evaluation and about the honest assessment of all the school activities(scholastic and co-scholastic). All the suggestions and recommendations discussed above lay lot of emphasis on need of examination reforms which as been comprehended as follows by national focus group paper on examination reforms 2006.

The focus group suggested that the exam reforms are needed because,

- i. Indian school board exams are largely inappropriate for the 'knowledge society' of the 21st century and its need for innovative problem-solvers.
- ii. They do not serve the needs of social justice.
- iii. The quality of question papers is low. They usually call for rote memorization and fail to test higher-order skills like reasoning and analysis, let alone lateral thinking, creativity, and judgment.

- iv. They are inflexible. Based on a ‘one-size-fits-all’ principle, they make no allowance for different types of learners and learning environments.
- v. They induce an inordinate level of anxiety and stress as reported by psychological counsellors.
- vi. A number of boards use good practices in pre-exam and exam management there remain several glaring shortfalls at several boards.
- vii. There is often a lack of full disclosure and transparency in grading and mark/grade reporting.
- viii. There is need for a functional and reliable system of school-based evaluation.

Thus, the review of educational commissions’ reports lays lot of emphasis on the continuous and comprehensive evaluation, for evaluation of all the aspects of the student development. Since the evaluation has to be carried out, continuously the school based or internal assessment has been recommended along with the external exams to make the evaluation comprehensive. In this regard CCE was introduced by CBSE (Central Board of Secondary Education) in the year 2000 (classes IX-X), I-V (2004) and VI-VIII (2007). The scheme of CCE and Grading System was strengthened by CBSE at Secondary Stage in all schools affiliated to it from the academic session 2009-2010. However though the commissions and curriculum frameworks emphasised on external and internal exams to be conducted, external exam were only conducted in class X and class XII. But with the introduction of FA and SA exams as per CCE, in class X there was school based internal marks and board based external marks both unlike earlier where only the board based marks were considered for the final results. However for all the other classes till class IX the FA and SA exams were conducted by the school and the evidences were provided to the CBSE.

## **1.2 Continuous and Comprehensive Evaluation**

Continuous and Comprehensive Evaluation (CCE) referred to a system of School Based Evaluation of student that covers all aspects of student development (CBSE, Teachers’ manual, 2011). It emphasises on the developmental process of student in two fold objectives namely continuity and comprehensiveness in evaluation.

The term ‘continuous’ was meant to emphasise the evaluation of identified aspects of students ‘growth and development’ which was seen through the learning outcomes and behaviour during teaching learning process, other academic events and co-curricular

activities. It means regularity of assessment, frequency of unit testing, diagnosis of learning gaps, use of corrective measures, retesting and feedback of evidence to teachers and students for their self evaluation. The 'continuous' aspect of CCE took care of 'continual' and 'periodicity' aspect of evaluation. Continual, meant assessment of students in the beginning of instructions (placement evaluation) and assessment during the instructional process (formative evaluation) done informally using multiple techniques of evaluation. Periodicity meant assessment of performance was done frequently at the end of unit/term (summative evaluation). Continuous evaluation would in bringing awareness of the achievement to the child, teachers and parents from time to time. They can look into the probable cause of the fall in performance if any, and may take remedial measures of instruction thereof, whenever and wherever required. The continuous evaluation would have helped in identifying various reasons of poor performance like personal reasons, family problems or adjustment problems. If the teacher and parents knew about the poor performance of the child in academics, child's achievement could be improved by counselling or by providing remedial practices.

The term 'comprehensive' meant assessment of both scholastic and co-scholastic aspects of the students' growth and development. In other words 'comprehensive' component of CCE took care of assessment of all round development of the child's personality. Scholastic aspects included subject specific areas, whereas Co-Scholastic aspects include Life Skills, Co-Curricular Activities, Attitudes and Values Assessment in Scholastic areas which was done informally and formally using multiple techniques of evaluation continually and periodically. The diagnostic evaluation took place at the end of a unit/term as a test. The causes of poor performance in some units were to be diagnosed using diagnostic tests. These were to be followed with appropriate interventions, like retests or remedial program if required. Assessment in Co-Scholastic areas was to be done using multiple techniques based on certain criteria, while assessment of Life Skills was to be done on the basis of Indicators of Assessment and Checklists (Examination Reforms, NCERT, 2006).

Since abilities, attitudes and aptitudes can manifest themselves in forms other than the written words, the comprehensiveness also refers to application of variety of tools and techniques (both testing and non-testing) and aims at assessing development of

learner's abilities like Knowledge, Understanding, Applying, Analyzing, Evaluating and Creating (CBSE, Teachers' manual, 2011).

Thus the major emphasis of CCE was on the continuous growth of students ensuring their intellectual, emotional, physical, cultural and social development through assessment of learner's scholastic attainments. CCE also aimed at using assessment for motivating learners to provide feedback and do follow up about improvement in learning in the classroom and to present a comprehensive picture of a learner's profile. So it could be said that CCE took care of assessment of all-round development of the child's personality. It included assessment in Scholastic as well as Co-Scholastic aspects of the pupil's growth (CBSE, Teachers' Manual, 2010).

The policy recommendations and the curriculum frame works emphasized on having internal and external both the examinations, but had not given weightage for both the type of examinations. CCE scheme emerged with the weightage that could be assigned to both internal and external examinations. The internal examination included both performance based activities where the student exhibited the skills that one had and pen paper test also.

### **1.2.1 Emergence of the Concept of CCE by CBSE**

The Central Board of Secondary Education introduced the scheme of Continuous and Comprehensive Evaluation in its schools in a phased manner.

In the year 2000, the Board implemented the concept of an independent Certificate of School Based Evaluation to be awarded by the school to all students who passed CBSE Class X Examination. This certificate was awarded in addition to the Board's regular certificate and marks statement at the end of the external examination. This extra certificate carried a footnote that a certificate of CCE is also being issued by the school and should also be studied for judging the total personality of the student. Besides Scholastic Areas, Co-Scholastic Areas were included in CCE for assessment over a continuous period of two years i.e. Classes IX and X. A recommended format with detailed guidelines was prepared and disseminated to schools for adoption by the CBSE. As the next step, in 2004, CCE was implemented in primary classes at I-V (Vide Circulars No. 5/18/25/04). Besides doing away with the concept of pass/ fail system upto class V, the assessment focused on the positive aspects of the child's

development during this stage. Accordingly Achievement Records for the primary classes (classes I & II and classes III to V) were also developed and recommended to schools with the objective of facilitating holistic learning. As a follow up, the Board decided to extend CCE to classes IX and X in 2009(CBSE, Teachers' manual, 2011). CBSE started the CCE with some objectives which are in alignment with the School based evaluation mentioned by various commission and committees on Education and by national curriculum frameworks.

### **1.2.2 Objectives of CCE given by CBSE**

Based on the aim of assessing the total personality traits along with the scholastic achievement for bringing the holistic development of the students, CBSE made the following seven objectives

- 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 the basis of 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 program 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-centred activity.

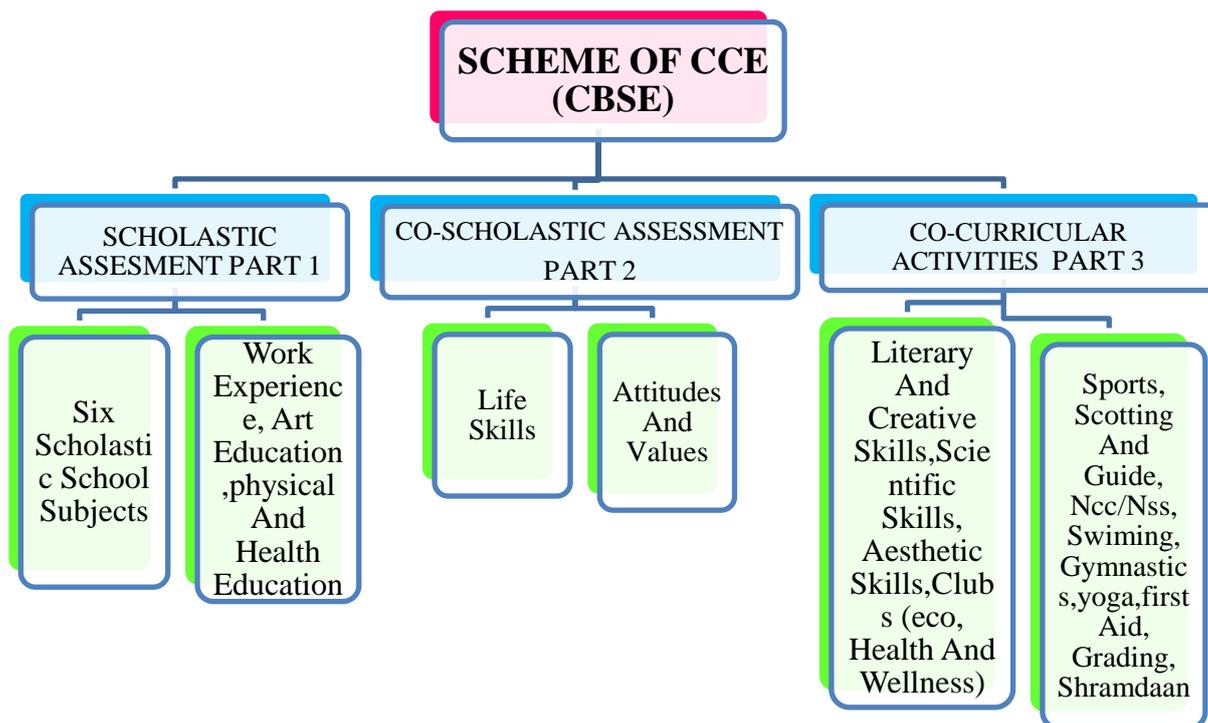
Besides the co-curricular activities and the scholastic subjects CBSE has included assessment of certain co-scholastic aspects in to the curriculum. All these aspects were to be graded by the teachers in order to address the all-round development of the students (CBSE, 2009).

### **1.2.3 CCE and its aspects as per CBSE**

The major emphasis of CCE is on the continuous growth of students ensuring their intellectual, emotional, physical, cultural and social development and therefore, it will not be merely limited to assessment of learner's scholastic attainments. CCE is supposed

to use assessment as a means of motivating learners to provide feedback and follow up work to improve upon the learning in the classroom and to present a comprehensive picture of a learner's profile. The scheme of CCE is as follows.

**Figure 1: SCHEME OF CCE (CBSE)**



The scheme for conducting CCE was divided into three parts by CBSE

**Part I:** Scholastic Assessment: the scholastic assessment was assessed for two aspects

**Part I (A)** Six scholastic subjects **Part I (B)** Work experience, Art education and physical & health education.

**Part II:** Co-scholastic Assessment: the co-scholastic assessment included two aspects:

**Part II (A)** life skills and **Part II (B)** attitudes and values

**Part III:** Co-curricular Assessment: the co-curricular assessment includes two sub-parts

**Part III (A)** Literary & Creative skills, scientific skills, Aesthetic skills, Performing Art, and clubs (Eco, health and Wellness clubs)

**Part III (B)** Health and Physical Education.

Though the structure of CCE was divided into three parts in the above figure the explanation in teachers manual reveal that CCE scheme had only two sections scholastics

and co-scholastics. The scholastics had all the seven scholastic subjects while the co-scholastics included the life skills values and attitudes and the co-curricular aspects mentioned above. Thus the co-scholastics was the term used for including the personality attributes like life skills, values and attitudes and the co-curricular aspects also. But since the diagrammatic representation shows the co-curricular separate from co-scholastic so the description about the grading pattern has been explained in the same manner in terms of part I, part II and Part III

### **Part I Scholastic Assessment:**

Scholastic assessment was done for the six scholastic subjects namely Mathematics, Science, Social Science, English, Hindi, regional language/Sanskrit and for subjects like work experience, art education, physical and health education/games.

Formative assessment and summative assessment were conducted for the six academic subjects. Formative assessment was supposed to be used by the teacher to continuously monitor the students' progress, provide them descriptive feedback, so as to improve their performance. Formative assessment provided feedback for both teachers and students. Each academic year is divided into two semesters. Each semester had two formative assessments. One assessment in each semester (FA2 and FA4) was on the basis of activities like quizzes, listening comprehension, conversation/dialogues, prepared speeches, research projects, creative writing, presentations, group projects, data handling and analysis, lab activities, preparing charts and models during the formative assessment. The other formative assessment comprised of a unit test in each semester (FA1 and FA3). The tools and techniques suggested by CBSE for formative assessment were rating scales observation schedules, anecdotal records, checklist, rubric, etc.

Summative assessment was carried out at the end of each semester for the six scholastic subjects (SA1 & SA2). It was assessed by administering an achievement test. The summative test consisted of objective type questions, MCQ's, short answer questions and long answer questions. Nine point grading scale was used for formative and summative assessments. In the final result the sum of grades of formative assessment and summative assessment was taken. 40% weightage was given to formative assessment and 60% weightage was given for summative assessment.

**Table 1: Nine point grading scale for measuring scholastic achievement**

<b>Marks range</b>	<b>Grade</b>	<b>Grade point</b>
91-100	A1	10.0
81-90	A2	9.0
71-80	B1	8.0
61-70	B2	7.0
51-60	C1	6.0
41-50	C2	5.0
33-40	D	4.0
21-32	E1	
00-20	E2	

Another part assessed under scholastic assessment includes Work Experience, Art education and Physical and Health Education/games.

**Work Experience** was suggested to be assessed on the basis of the indicators exhibited by the students like collaborative approach towards learning, innovative ideas expressed, plan and timeliness followed, motivation shown, demonstration of positive attitude, guidance provided to others, facilitating the learning of others and correlation of learning with the real-life situation.

**Art education** was suggested to be assessed on the basis of the indicators exhibited by the students like innovative and creative approach shown, aesthetic sensibilities, observation skills, interpretation and originality, correlation of art with real life, willingness to experiment different modes and mediums, awareness and appreciation of art works and peer appreciation.

**Physical and Health Education/games** was suggested to be assessed on the basis of indicators exhibited by the students like appreciation and understanding of good physical health and fitness, involvement in the sports or physical education programs, team work exhibited, knowledge of different sports and rules of the games, motivation and leadership, skills of co- ordination, agility and balance, awareness of rules and safety and evidence of being self- disciplined.

The aspects under Part II (B) of the scholastic aspects was not given any weightage in terms of marks but was assessed on the basis of indicators exhibited by the students. The grades were given on five point scale (A\*,A, B, C, D).

### **Part II Co-Scholastic Assessment**

The term co-scholastic refers to aspects related to psychomotor and affective domain. The co- scholastic aspects were suggested to be assessed on the basis of two aspects

Part II (A) life skills and Part II (B) attitudes and values.

**Life skills** are divided into three sub parts: thinking skills (includes self -awareness, problem solving and dealing with stress); social skills (includes interpersonal relationship, decision making and creative thinking); emotional skills (includes managing feeling/emotion, communication skills and empathy). Certain indicators were given by CBSE based on which the students are graded for these three sub parts under life skill. The grades are given on a five point scale (A\*, A, B, C, D).

**Table:2. Five point grading scale for scholastic aspects and co-scholastic aspects**

Scholastic aspects & Co-Scholastic aspects	Grade
Life skills	A*,A,B,C,D
Work experience	
Art education	
Physical Education	

**Attitudes** of the students towards teachers, peers, school (school programs, activities and school property) and environment are assessed based on the indicators given by the CBSE board.

**Values** were assessed on the basis of presence of indicators like respect for rules and following them, honesty, self-respect, politeness, leadership, courteousness to everyone, and respect to diversities (cultural, opinions, beliefs and abilities) and respect to opposite gender. The attitudes and values are graded on the three point scale based on the presence of observed indicators.

**Part III Co-Curricular Activities and Health and Physical Education.**

This aspect was divided into two parts: co-curricular activities Part III (A) and physical education Part III(B). There are subparts in each of these two parts.

**Co-curricular aspects** include activities related to literary and creative skills, scientific skills, aesthetic skills, eco health and wellness club. Any two of these activities are to be compulsorily selected by the students. The students are graded on three point scale based on the presence of the indicators given by CBSE.

**Health and Physical Education** aspect included different activities like Sports/indigenous sports, NCC/NSS, Scouting and guiding, Swimming, Gymnastics, Yoga, First Aid and Gardening/Shramdaan. Out of the different activities, the students have to select any two activities compulsorily. The students are assessed on three-point

scale based on the presence of indicators given in the manual.

**Table: 3 Three point grading scale for Co-scholastic aspects and co-curricular aspects**

Co-scholastic aspects & Co curricular aspects	Grades
Attitudes	A+, A & B
Values	
Literary and creative skills	
Scientific skills	
Aesthetic skills	
Clubs (Eco, health and wellness)	
Health & Physical Education	

Though CCE explains comprehensive evaluation, the comprehensiveness is not in terms of comprehending all the scores given for scholastic and co-scholastic aspects and giving one single comprehensive grade to a student. Comprehensiveness is in terms of grading all the aspects of the student's performance i.e. scholastics and co-scholastic all aspects. There is a disparity in the grading pattern of scholastic aspects and the different aspects of co-scholastic aspects. Nine point grade pattern from grade A1 to E2 is given for scholastic subjects, some of the co-scholastic aspects like Life skills, Work experience, Art education, Physical Education were suggested to be graded on five point scale i.e. A\*, A, B, C, D; while the remaining co-scholastic aspects were to be graded on three point scale i.e. A+, A & B. So when something has to be made comprehensive at least similar aspects should be given similar weightage, here the CBSE has made two separate sections in the co-scholastic aspects itself, leading to an impression that some of the co-scholastic aspects are to be more minutely observed and graded on five point scale and other aspects can be observed so that it can be graded on 3 point grade scale. So comprehensiveness here obviously means assessment of all the aspects of student's attributes but with differential weightage to scholastic and co-scholastic aspects.

### **1.3 Associating the CCE objectives with the curricular aspects.**

CCE was a school based System of evaluation, which focused on the purpose of assessment like readiness testing, screening of development, evaluation of performance in cognitive, affective and psychomotor domains more frequently, systematically and effectively (teachers' manual CBSE, 2010). Hence, in its true spirit, it triggered an all

round development of the learner by encouraging all kinds of learning in life both inside the school as well as outside it. It was child-centred as it attempted to consider the learner as a unique entity for its individual pattern of development. (Teachers' manual CBSE, 2010). CCE was multidimensional in its nature and aimed at recognizing and taking care of learners' social, emotional, physical, intellectual and other areas of development which were interrelated and could not be considered in isolation. It also called for the use of multiple techniques and tools of evaluation (teachers manual CBSE, 2010). This implied that the objective of CCE given by CBSE provided broad guidelines for the all-round development of the students. CBSE had given certain aspects (as described above) namely scholastic and co-scholastics aspects which should be developed/enhanced in the students through the teaching learning process and other co-curricular activities. Besides this, CBSE laid emphasizes on regular assessment of these aspects to provide feedback to the students regarding their development. Thus it became very significant to survey the use of variety of assessment tools and techniques used to assess the various aspects of students' learning. This survey was an effort to find out the various aspects of teaching learning process and the assessments done to evaluate the learning in the class IX students of Vadodara city. For this it became imperative to understand the objectives of CCE given by CBSE explicitly.

To survey the way in which the CCE was being conducted for various aspects mentioned in its objectives, it was necessary to associate the objectives to the various curricular, co-curricular and co-scholastic activities being conducted in the school. This helped the researcher to make a clear framework for conducting the survey in terms of drawing objectives for the study, planning and preparation of various tools and techniques for data collection.

### **1.3.1 Cognitive skills**

The cognitive skills given by Bloom's taxonomy in 1956 reflects six levels on which the student's cognitive skills should be assessed namely knowledge understanding, application, analysis synthesis and evaluation which has been now modified as comprehension, application, analysis, synthesis evaluation and creation . These skills were assessed by the external as well as the internal exams. In terms of CCE scheme it may be explained as formative and summative assessment. Thus both summative and formative assessment both should lay lot of emphasis on all the levels of

cognitive objectives given by Bloom. Since the external exams were pen paper tests it had its limitations in assessing the higher cognitive skills. Considerable progress had been achieved in improving the question papers of external exams. But still the efforts for making the exams more comprehensive in terms of more concern coverage, assessment to higher mental abilities, elimination of chance factor by giving due weightage to essay type questions, short-answer questions and objective type test items (Evaluation and Examination Reform, MHRD, 2001). Due weightage should have been given to Cognitive evaluation was associated with the syllabus to be transacted, which the teacher felt too burdensome. The load of excess syllabus could be taken off by encouraging innovative evaluation practices which test the abilities like comprehension, application and analysis followed by timely remediation. (NCFSE, 2000).The formative assessment could include such innovative evaluation practices like oral testing, open book exam, group work, laboratory works, etc. Thus both the type of assessments should ultimately lead to assessment of knowledge, understandings, skills, attitudes and values attained by the learners in respect of common core components (Evaluation and Examination Reform, MHRD, 2001).

Assessment of these cognitive objectives and ensuring its development/enhancement went hand-in hand through the teaching learning process and the pen paper tests. Thus if deliberate and conscious efforts were not made to assess these skills they would be least focussed during curriculum transaction also (Evaluation and Examination Reform, MHRD, 2001).

This implied that the investigator had to check the presence of questions related to different levels of cognitive skills, in the pen paper tests, designed by the respective subject teacher. The observation of the classroom transaction for finding out the opportunities given by the teacher to use various cognitive skills was equally significant. The documents like lesson plans and rubrics used for evaluation of formative assessment was also used to gather evidence for the deliberate efforts being made by the teacher to transact and assess these skills.

### **1.3.2 Psychomotor Skills**

When 'learning' was to be understood in the ' broader sense of 'skill', 'quality', 'attitude', and 'value' it was important to assess all the cognitive, psychomotor and affective area learning outcomes of education (NCFSE, 2000). Benjamin bloom has elaborately described it as different level of objectives for the psychomotor domain

like Perception (means the use of sensory cues to guide an action), Set (to show readiness to take action to perform the task or objective), Guided Response (to show the Knowledge of steps required to complete the task or objective), Mechanism (to Perform the task or objective in a somewhat confident, proficient, and habitual manner), Complex Overt Response (to perform the task or objective in a confident, proficient, and habitual manner), Adaptation (to modify actions if a problematic situation arises) and Organization (Creates new tasks by using the previous knowledge). This implies that psychomotor skills mean the appropriate use of physical movement, co-ordination and the appropriate use of motor skills. Development of these skills requires practice and was measured in terms of speed, precision, distance, procedures, or techniques in execution (Simpson, 1972). Thus, psychomotor skills ranged from manual tasks, such as digging a ditch or washing a car, to more complex tasks, such as operating a complex piece of machinery or dancing. Even the skills like speaking, writing, listening, oral reading, performing laboratory experiments, drawing, playing musical instruments, dancing and gymnastics and use of equipment can be considered as psychomotor activity (Gronlund and Linn, 1990). Though the authors did not label the skills as psychomotor skills but has stated that these skills should be assessed in the schools. Designing, fabrication, estimation and measurement are a prelude to higher level of technological and quantitative skills along with development of basic language skills of LSRW for different subjects (NCF, 2005).

CBSE did not spell out the psychomotor skills to be assessed but the guidelines to assess the LSRW skills, laboratory working skills, handling of first aid box, display of gardening skills, performing work experience tasks, making models, skills related to sports, art, music and dance shows an agreement to the psychomotor skills discussed by various authors and the national curriculum framework, 2005. The assessment of these attributes were evident from the rubrics that the teacher made for the various activities described above; awareness of the teacher regarding the assessment of these attributes can be asked through the teacher's questionnaire and opportunities given to the students to exhibit their psychomotor skills and criterion based feedback given to them for such tasks.

### **1.3.3 Affective skills**

The focus of education is moving away from providing mere cognitive skills (the

traditional 3Rs) to fostering inter-personal and intra-personal development. Intra-personal intelligence enables us to make sense of the things we do, the thoughts we have, the feelings we get- and the relationship between all these aspects. Interpersonal intelligence enables us to tune into other people, to empathise with them, to communicate clearly with them, to inspire and motivate them, and also to understand the relationships between the individuals. Education for promoting emotions needs to be recognised as an essential element of the educational process in the classroom since emotions provide information, direct attention, and facilitate the attainment of goals (NCF, 2000). The affective domain (Krathwohl, Bloom, Masia, 1973) includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. There are five major categories of behaviour as given by Bloom Receiving Phenomena (Awareness, willingness to hear, selected attention) Responds to Phenomena (Active participation for learning, attention and willingness towards learning )Valuing (expression of values in the learner's overt behaviour), Organization (Organizing values by comparing, contrasting and relating them) and Internalizes Values (characterised by the person's control over his or her behaviour).

This implies that the skills required to exhibit these behaviours may be considered as the affective skills (Krathwohl, Bloom, Masia, 1973).

The affective skills were the skills that cater to various aspects of the student's personality like thinking, emotions, sociability, attitudes and values. The expression of feelings towards various aesthetic, social, recreational activities, appreciation of feeling of satisfaction, enjoyment of music art, literature, physical skills, emotional stability and social adaptability could be considered as the exhibition of affective skills (Gronlund and Linn, 1990). Though these attributes were not named as affective behaviors by the authors, but they laid emphasis on assessment of these affective attributes.

CBSE had described these affective skills in form of life skills, attitudes and values under the heading of co-scholastic aspects, which were expected to be evaluated on a five point scale based on observation of the teacher and the anecdotal records recorded for each child. Evaluation will reflect the outcomes of each learning intervention (NCF, 2000). Moreover, value education should be judiciously integrated with all the subjects of study. The objectives of co-scholastics will be directly or indirectly achieved in classrooms, playgrounds, cultural activities, school assembly and other such places

(NCF, 2000). Conscious and organised attempts to be made for imparting social, moral, spiritual values, attitudes, skills and qualities of character like capacity for clear thinking, the ability to communicate easily with one's fellow-men, the scientific attitude of mind, a sense of true patriotism and an appreciation for the productive work through secondary class curriculum as per the need of the adolescent and democratic society (Secondary Education Commission, 1962-64). All the descriptors of the co-scholastic aspect implies that if the co-scholastic aspects were to be evaluated they were to be first transacted through the curriculum. Thus observing the classroom teaching learning process with respect to the integration of life skills values and attitudes could be an important technique. Apart from that researcher implemented the standardised tools for assessing the life skills, attitudes and values.

#### **1.3.4 The de-emphasis of memorization**

The dictionary meaning of de-emphasis shows laying less importance to something. More emphasis on 'application' and learner-centered mode of teaching indicates the de-emphasis of memorization. Thus, de-emphasis of memorisation may be to shift the focus from knowledge based rote learning to application based learning (Krathwohl, Bloom, Masia, 1973). If the de-emphasis of memorisation indicates that the memorisation should be less emphasised. In this regard examinations should support de-emphasis of memorisation (NPE, 1986). External examination may have a limitation in Assessment of higher order cognition or de-emphasis of memorisation, hence school based assessments may be an alternative for delivering as well as assessing such skills.

Exams may be detrimental for reducing memorization, so school based evaluation for a broader means of assessment is emphasised (NCF, 2005). While the questions asked in the external exams or the written exams should also enable to assess the arguments and application rather than just testing the memorisation of facts from the text. For such an examination, categorisation of questions according to the competency being evaluated is to be done in form of blue print (NCF, 2005). This implied that the exams should have application level questions which can be observed from the questions paper made by the teacher. Also if the assessment of application of knowledge was emphasised learning process should provide opportunity to apply the knowledge. It became evident that teaching learning process and assessment tools should provide an opportunity to develop the thought process for applying and analysing the knowledge delivered.

Development of thought process could be attributed to the application of the knowledge that the students exhibit during the teaching learning process; observation of classroom teaching learning process for learner centred activities for the provision of opportunities to develop higher order thinking, scanning the formative assessment question papers, for finding out the questions which are based on higher order thinking may serve the purpose of knowing the de-emphasis of memorisation. Hence the regularity in conducting learner centered activities was to be surveyed with the help of questionnaires and observation of classrooms and laboratory work. Participatory and transparent evaluation can encourage learners to learn more and they may ultimately turn to be lifelong learners (NCFSE, 2000).

Memorisation lead to achievement of knowledge level objective of learning which was of a lower level of cognition. This implied that higher level of cognition has to be focussed if de-emphasis of memorisation had to be ensured, both during the teaching learning process and evaluation of learning outcomes. Connecting knowledge to life outside the school, for ensuring that learning shifts away from rote methods, enriching the curriculum so that it goes beyond textbooks and making examinations more flexible and integrating them with classroom life are the principles being emphasised in relation to higher order cognition (NCFSE, 2000). Thus, it is obvious that classroom practices are to be observed for the regularity of learner centred activities and for the opportunities given for higher order thinking to the students. The survey may limited the researcher to observe only few classes hence the responses of the students in the student's questionnaire with respect to regularity of learner centered activity helped in cross validating it with the responses given by the teachers regarding the regularity of learner-centered activity for learning.

### **1.3.5 Making Evaluation an integral part of teaching-learning process**

The primary purpose of assessment and evaluation was to improve student's learning to help them progress towards overall development. Information about their learning gathered through assessment during teaching-learning, help teachers to determine students' strengths and learning gaps in the concerned subjects which serves to guide teachers in adapting curriculum and teaching-learning approaches/methods to suit student's needs. Thus, the assessment had to be an integral part of the teaching learning process. A good evaluation and examination system can become an integral part of the learning process and benefit both the learners and the educational system by giving credible feedback

(NCF, 2005). This implied that if evaluation was taken as integral part of teaching learning process it not only gives feedback to the teachers about their methods of teaching but also helped the learners know their strengths and weakness and served for the purpose of reflect how well a student has achieved the curricular expectations. But the worth of the feedback increases if the process of assessment was through varied modes. Constructive feedback should be an integral part of the learning process and assessment (Kapur, 2008). This related to the variety of opportunities provided by the CCE scheme of CBSE which aimed at improving the teaching learning process and the assessment practices so that a worthy feedback could be given to the students. For this purpose CBSE suggested to give projects, assignments, research projects, group activities, etc for formative assessment. Since these assessments aimed at developing certain thinking skills, communications skills literary skills ample time should be given for completion of these tasks. Only if the students got ample time to complete the tasks the feedback would be of some utility to help students improve their performance next time. Thus, provision of timely feedback was inquired from the students and parents and this was cross validated with responses given by the teachers in the same regard. Thus evaluation as an integral part of teaching learning would be reflected in the verbal and non-verbal feedback given by teachers during the teaching learning process and also the written feedbacks given for the formative assessments tasks/tests and the notes given in the notebooks. Thus classroom observation for verbal and non-verbal feedback given to students, regularity in checking notebooks and the feedback given therein, provision of timely instructions regarding projects assignments, its collection and assessment by the teachers ensured that the evaluation is the integral part of teaching learning process. The classroom observations could provide evidence for the written and verbal feedback given by the teachers for the formative assessments, the type of feedback given to the students could be inquired from the students through the student's interview and parents interview.

### **1.3.6 Strategies for Diagnosis and Remedial Practices**

Evaluation can help gauge progress toward desired educational outcomes, increase stakeholder participation and empower teachers and students to build and sustain transformation in schools. The main purpose of the quality aspect in education has been evaluation and is associated with the quality performance as the performance abilities of the students (NCFSE, 2000). The performance abilities is usually

understood in terms of achievement in of the students in academic subjects. Also the school boards have fixed a minimum scores to be achieved in the scholastic tests to indicate that the minimum objectives of learning has been achieved by the students. The achievement of the minimum scores (passing marks) does not necessarily ensure the attainment of minimum levels of learning as suggested by NCFSE 2000. But the lacking concepts need to be diagnosed and remedied to meet the MLL. “The specification of the MLLs should meet the purpose of enhancing the learning attainments and serve as performance goals for the teacher and output indicators for the system.”(NCF, 2000). This implies that students’ performance is an important indicator of quality of the education system (Global Monitoring Report 2006 – Literacy for Life, UNESCO, 2006). This performance is reflected by evaluating the students using the different formative and summative tests. The results of the test would help in diagnosing the slow learners and the low achievers. This would require the teachers to conduct remedial practices for enhancing their performance (NCF2000).

The diagnostic and remedial measures conducted by the teachers’ was observed for the regularity of such practices during the school visits. Parents and students were important source to gather the information about the regularity of diagnostic and remedial practices in the school. This was used to cross validate the teacher’s response in the teachers’ questionnaire with respect to the diagnosis and remediation carried out by them.

### **1.3.7. CCE for taking appropriate decisions about learner; the process of learning and the learning environment**

CCE also aimed at using evaluation as a social utility tool. Social utility is defined as those benefits of a product or service that satisfies interpersonal needs (McIntyre & Miller, 1992). In the context of secondary schools social utility can be interpreted as the attributes and skills that develop in the students through the various scholastic and co-scholastic activities. The curricular activities are based on the curricular objectives which in turn are based on the emerging social contexts. In this respect, the role of arts, health, physical education, work education and peace education are important to infuse creativity, socialisation, self reliance, resourcefulness, peace and health related values in students, which would ultimately help in economical, social and personal development of the student later in their life (NCFSE,2000). The economical, social and personal development of the student would lead to the growth

of the society as a whole and this can be obviously termed as the social utility of the school system. Conscious and organised attempts has to be put to integrate social, moral and spiritual values, development of certain skills, attitudes and qualities of character, capacity to think clearly, communicate with fellow men, appreciate productive works of others (Education Commission 1964-66). For the above mentioned development of values and skills opportunity should be provided for discussion of programmes of work-experience, physical education and social service through art, craft, dance, music, festival celebrations, narration of life history of leaders, debates, dramas, etc (Education Commission 1964-66). Thus, it was evident that provision of such opportunities were important for the social, moral and personal development of the student. Similarly CCE also aimed at development of the above mentioned attributes of the students by assessing them for club activities and sports activities.

CBSE had not given directly any indicators for determining Social utility of CCE. But had described a point in teacher's manual for adolescents equipping them to take proper decisions when they step out into the real world, which may be interpreted as social utility indicator. For this CBSE suggested development of ability to interact with their peers, society and community, ability to cope with the changes in life and flexibility to adopt a rapidly changing environment. Thus it became evident that social utility could be assessed based on the interaction of the students with peers, sensitivities towards them, coping with the changes in classroom settings; sensitivities to social issues and social improvement and participation social awareness programs. For this, CBSE suggested provision of various club activities like Scientific Clubs, Literary and Aesthetic Clubs, Performing Arts Clubs, Eco, Health and Wellness Club and scholastic activities conducted during the formative assessments. Thus, the activities conducted in these clubs and the activities conducted for social awareness, community participation was gathered as evidence for the opportunities provided to the students, for developing attributes required to live in the real world

Observation enabled in seeing the learning environment and the appropriate decisions being taken by the teacher about the process of learning and the about the learner. Classroom environment created by the teacher also played an important role in making the teaching learning satisfactory. Thus, class room observation for finding out the satisfaction of the learner in terms of the learning environment created by the

teacher was considered. A classroom environment where the students' doubts were clarified, they were allowed to ask questions, talk about the topic taught and where they were engaged in learning through a very lively interaction is called as enabling classroom environment and such an environment helps increase self confidence and self esteem of learners and improves learning it see (NCF, 2005) Apart from this the parents also play an important role in identifying whether the students have learnt well hence interviewing the parents for knowing their views about the learning environment and the learning taking place in the students can be a data source. Moreover involvement of the parents in the community participation programs and the other relevant programs was also inquired. The school must explore opportunities for active engagement by parents and the community in the process of learning (NCF,2005). Effectiveness of a program is much related to the feedback from the stake holders. Since students are the main stake holders of CCE, it would be imperative to take their reflections through students' interview to find out its effectiveness in terms of their engagement teaching learning process, learning environment and the decisions taken by the teacher to improve the learning in them. This was supplemented by the responses of the teachers given in the teachers questionnaire about the modifications that they do in the teaching learning process, the regularity in giving feedback to the parents and students about the achievement of the students. Finding out the evaluation tools and techniques used to assess the club activities will help in exploring the ways and means used by them to make CCE effective.

### **1.3.8 Make The Teaching and Learning Process A Learner-Centered Activity**

Making the teaching learning process a learner centered activity implies the active involvement of the students in the teaching learning process. In learner centered activity the students are at the center of the learning process and the teacher has to provide opportunities to the learners to learn independently either in form of open ended questions, assignments and problems that require critical and creative thinking like making role plays, co-operative learning in groups,etc. (Collins & O'Brien,2003). Properly planned learner centered activity increases the motivation to learn, retain the knowledge, gives deeper understanding and develops positive attitude towards the subject (Collins & O'Brien, 2003).

Thus learner centered activity keeps the student at the center and the teacher is just a facilitator. So the teaching learning process becomes a collaborative activity wherein the teacher facilitates and students gather new ideas and thoughts and then they discuss. In a learner-centered learning environment, learners are treated as co-creators in the learning process, as individuals with ideas and issues that deserve attention and consideration McCombs and Whistler (1997).

CBSE also aimed at helping the students construct their own knowledge through various learner centered activities conducted for formative assessments as well as for understanding the various concepts in the scholastics subjects. The classroom observations served as ample evidence for knowing whether the teaching learning was learner centered and the students response in the students' interview could be a source to know regularity of such activities during the teaching learning.

CCE had tried to present a make assessment of all the aspects (scholastic and co-scholastics aspects) of the child's personality to be assessed. In the CCE there was 60 percent weightage for summative assessment and 40 percent weightage to formative assessment, the summative assessment was only based on the pen paper test conducted at the end of each semester and the 40 percent included the assessment of formative activities, life skills, attitudes, values, scientific skills, aesthetic skills, literary skills, physical health, work education and art education. Since there was no fixed structure given for the inclusion of all these aspects in the formative evaluation, now CBSE has made a new structure for formative and summative assessment where 90 percent weightage is for scholastic achievement and 10 percent weightage is for co-scholastic aspects. This new system is called the Uniform System of Assessment, in this 90 percent weightage 80 marks were allotted to annual exam which would be conducted at the end of the academic year and 10 marks will be from the periodic pen paper test which will be conducted thrice in one academic year. Only 5 marks weightage is given to subject enrichment activities which includes the skill based activities like role play, skit, experiment performance etc. and 5 marks for notebook submission. So the weightage of co-scholastic has been reduced to 5 marks out of 100 i.e. 5 percent weightage only. While in CCE 20 percent weightage was for co-scholastics out of 40 percent formative assessment. The main points of Uniform System of Assessment is given below.

The Uniform System of Assessment has the following points which has been restructured

1. Removal of semester system and reintroduction of Annual board Examination in class X and Annual exams based on cumulative syllabus studied in the whole year while the CCE scheme had semester system and results were separately made for both the semesters.

## 2. Scholastic Area

a) Grading would be on nine point scale for class IX. But unlike in the CCE scheme if the student scored less than 33 percent the students could re appear for the exams, in the uniform system of assessment the students would be considered failed if they secure less than 33 percent in either of annual(external exam) and internal exam.

b) Final results will constitute of 80 annual exam marks and 20 marks of internal assessment in the Uniform system of assessment While the CCE scheme had 40 percent for formative assessment and 60 percent for semester end exams.

c) Annual exams would be conducted for 80 marks and student has to secure 33 percent to pass , while in CCE the student easily got the 33 percent because of the formative assessments. The students could give retest and get passed if they scored less than passing marks, so there was no detention in the CCE scheme but in the uniform system of assessment the students can be detained if they score less than 33 percent out of 80 marks paper.

d) In the uniform system of assessment internal exams consists of 10 marks periodic tests, 5 marks notebook maintenance and 5 marks subject enrichment activities out of which the students should secure 33 percent in the internal marks also. While in the CCE scheme the internal exam marks were not fixed for each activity and there was no compulsion to pass in the internals. However since most of the activities were performance based activities the students scored well in the internals while CCE was there.

## 3. Co-scholastic assessment

Co-scholastic assessment would be done on five point scale as per the the Uniform system of assessment and no descriptive indicators would be written and the students

would not be upgraded based on the grades in co-scholastics. In the CCE scheme the co-scholastics assessment was on five point scale and along with that the descriptive indicators were written in the report card also the students were given grade up gradation for any one subject based on the grade in co-scholastic aspects. The co-scholastic aspects in the Uniform system of assessment include work education/pre vocational education/art education/ health and physical education. While in the CCE scheme the co-scholastics included life skills, attitudes, values and any two among work education; shramdaan; first aid ; Performing arts, Eco club and health and wellness club; health and physical education and yoga.

The aim of CCE was to have internal assessment and external assessment, the new system of uniform system of assessment also have internal and external assessment. There was lot of flexibility to the schools and the teachers in planning and assigning marks to all the formative assessment activities and deciding the type of activities to be conducted, but had to reduce it to 40 percentage later. While in the uniform system of assessment the marks for each internal task is fixed and the type of activities to be conducted is also fixed. The CCE scheme had 40 percent weightage for formative assessment and 60 percent weightage for pen paper test. Neither the marks for formative activities were given nor the type of activities were fixed, so the marks for FA and type of FA activities with 40 percent weightage were decided by the school or the subject teachers. But in the Uniform System of Assessment 90 percent weightage for pen paper test and 10 percent for notebook submission and subject enrichment activity. The 90 percent is constituted of 80 marks pen paper test (yearly exam) and 10 marks will be counted from the periodic tests that would be conducted thrice in a year. So total 80 marks annual exam, 10marks periodic tests, five marks notebook submission and five marks subject enrichment activities.

The CCE scheme worked on no detention policy but the uniform system of assessment allows to detain the students if they score less than 33 percent either in external exam or in the internal exams. The CCE scheme had five point grading for co-scholastics and had descriptive indicators to be written in the report card but the descriptive indicators for co-scholastics are not to be written in uniform system of assessment only the grades from the have to mentioned in the report card. CCE scheme gave up gradation to the students in one scholastic subjects based on the

grades of the co-scholastics but uniform system of assessment does not allow to upgrade the scholastic grades based on the co-scholastic grades.

However though the uniform system of assessment had been introduced the aim of assessment remains the same i.e. having the formative and summative exams both to evaluate the child's abilities. The weightage of formative and summative exams are different in both the systems.

The uniform system of assessment has been introduced in the year 2017 and this research was conducted in 2014-15 and 2015-16 when CCE was functional in CBSE schools. So the investigator tried to find out the implementation of various objectives of CCE being practiced in the schools with the help of the above mentioned curricular aspects and using different data sources.

#### **1.4. Rationale of the Study**

Education has a dynamic role to play in social transformation and national development, which makes it essential that the content and processes of education are continuously renewed in order to make them in tune with the changing needs, aspirations and demands of the society. CCE introduced by CBSE is one such change according to the changing needs of the society. Continuity means assessment throughout the session, and making it an integral part of teaching learning process through formal and informal methods. Comprehensiveness means assessment of all areas of learning such as intellectual, physical, social personal qualities, interests, attitudes and values. The term comprehensive also means variety of evaluation tools and techniques employed for different learning areas. The CCE is multi-dimensional as it involves multiple techniques and different persons like teacher, pupil, peer, parent and community. The CCE was started in year 2000 by CBSE for the students of IX and X class in order to reduce stress on children, make evaluation comprehensive and regular, provide space for the teacher for creative teaching and to provide tools for diagnosis and for producing learners with greater skills. Since it is more than a decade that the CCE has been implemented in the secondary classes of CBSE affiliated schools it is bound to have achieved more stability in achieving the objectives of CCE. Thus a study into the achievement of objectives of CCE by the secondary section of the CBSE affiliated schools was provided an insight about the refined and stable practices in the schools. Based on the guidelines of CCE given by CBSE many state governments have also started the SBE (School Based

Evaluation) in the state board schools. However, studies suggest that there are several problems faced by the teachers in implementation of CCE (Kothari and Thomas, 2012) in the upper primary classes of Kerala. Further studies also suggest the irregularity in the assessment of co-scholastic aspects and irregularity in diagnosis and remedial practices in the primary classes (Rao and Rao, 2004). In this regard the investigator was curious to find whether the same practices were prevalent in the secondary classes of using CCE scheme for assessment. The CBSE started CCE first in IX and X class students with the aim to equip the students with required knowledge and skills for the real world. Students of IX class were at a level at which they are required to study the concepts profoundly. At this stage, the students exhibit more cognition abilities when they encounter novel stimuli and when they were motivated to engage in systematic thinking, rather than lapse into mindless processing (Zimbardo and Leippe, 1991). Along with the learning of the concepts, the students develop skills and personality attributes required for future life in the secondary classes. The sole responsibility lies with the teacher to integrate the development of personality attributes, skills and knowledge of the students through well planned teaching learning activities and co-curricular activities. Further the assessment of these skills, personality attributes and knowledge should also be specific. But studies showed that scholastic aspects were assessed continuously while the assessment of co-scholastic aspects are neglected in the primary classes (Bhattacharjee and Sharma, 2009). So with the objective to find out how specifically the assessments are conducted with respect to both scholastic and co-scholastic aspects suggested by CCE in the secondary classed the investigator was keen to find out the implementation CCE with respect to all the aspects mentioned in the objectives of CCE. Apart from this, the investigator assumes that there may be some issues and concerns with respect to the implementation of CCE in the secondary classes since the reviewed studies suggest the prevalence of problems in its implementation in the primary and upper primary classes (Kothari and Thomas, 2012; Rao and Rao, 2004; Rao, 2006; Nava and Loyd, 1992), thus, the investigator was keen to find out the problems or related to CCE implementation in the secondary classes. After reviewing the related literature the investigator was bound to think upon certain questions which may lay the foundation for carrying out the research.

#### **1.4.1 Research Questions**

1. How were the co-scholastic aspects assessed?
2. How does the teacher conduct diagnostic and remedial practices in the

schools?

3. How formative assessment was conducted?
4. What were the challenges faced by the teachers in executing the teaching learning process and assessment in accordance with CCE scheme?

## **1.5. Statement of the Problem**

A Study on the Implementation of Continuous and Comprehensive Evaluation in CBSE Schools

### **1.5.1 Objectives of the study**

1. To study the process of CCE with respect to following aspects.
  - a. Development of cognitive skills, psychomotor and affective skills in the students.
  - b. Enhancement of values, attitudes and life skills
  - c. Feedback provided for the written and performance based formative tasks
  - d. Diagnosis and remediation of learning difficulties for improving student's achievement
  - e. Modifications in the teaching learning strategies; learning environment provided to the learners, based on the type of learners
  - f. Orientation and Feedback given to the parents
  - g. Provisions for participation in co-curricular activities and the assessment of those activities
2. To study the opinion of teachers, parents, students and principals regarding the implementation of CCE
3. To study the challenges faced by the teachers, parents and principal and students with regard to CCE implementation

### **1.5.2 Explanation of the term**

**CCE:** According to CBSE continuous means the evaluation of regularity of assessment, frequency of unit testing, diagnosis of learning gaps, use of corrective measures, retesting and feedback of evidence teacher and students for self-evaluation and comprehensive means evaluation of abilities, attitudes and aptitudes of the students using variety of tools and techniques (both testing and non-testing).

### **1.5.3 Delimitation of the study**

The study was delimited to the IX standard students (academic year 2014-15) of CBSE affiliated schools in Vadodara district.