CHAPTER- II

REVIEW OF RELATED LITERATURE

"A Survey of related literature is necessary for proper planning, execution and right concept of the problems and solutions. It provides guiding hypothesis, suggestive methods of investigation and comparative data for interpretative purpose."

Good, 1959 (p.59)

2.1 Introduction

One of the vital initial tasks to embark on a research study is to make use of the existing literature in order to acquaint oneself with the available body of knowledge in one’s area of interest. This also enables the researcher to reflect and see connections as well as differences between the study to be researched and earlier researches.

Kumar, 2009 (p.30) stated that the “literature review is an integral part of the entire research process and makes a valuable contribution to almost every operational step. It has value even before the first step; that is, when one is merely thinking about a research question that one may want to find answers to through one’s research journey. In the initial stages of research it helps one to establish the theoretical root of one’s study, clarify one’s ideas and develop one’s methodology, but later on the literature review serves to enhance and consolidate one’s knowledge base and helps to integrate one’s findings with the existing body of knowledge. Since an important responsibility in research is to compare one’s findings with those of others, it is here that the literature review plays an extremely important role.”
The review of related literature provides conceptual framework and direction to the research. Review of related literature consists of two words ‘review’ and ‘literature’, the term ‘review’ implies organizing information of the specific areas of research to construct up a structure of knowledge to exemplify that proposed study would be a new addition to this field. In research methodology, the term ‘literature’ implies knowledge of a particular area of the discovery of any discipline which includes theoretical, practical and its research studies. The task of review of related literature is highly essential and tedious because the researcher has to incorporate the available reviewed studies in a distinguishing way to provide the basis for the study.

The objectives of the review of related literature pertains to providing theories, information, facts, explanation or hypotheses which become useful in the conception of new problems to point out whether the facts already exists to determine the problem adequately without further investigation. It avoids the duplication, to provide the basis of the hypotheses. The researcher can generate research hypothesis/questions on the basis of existing studies, to propose methodology, sources of the data and statistical techniques suitable to the resolution of the problem, to provide some implication regarding strong points and limits of previous studies and to bring about required improvements in the study.

2.1.1 Functions of Review of Related Literature

Review of related literature can be prolonged, intimidating and exasperating, but it is also a worthwhile exercise as it enables the researcher to reflect and reproduce on the issues
already addressed and still to be discovered which forms a significant basis for the formulation of a problem. A literature review serves the following functions:

- Aids in showing how one’s findings has been added to the existing body of knowledge in one’s professional development;
- It aids in analyzing the findings contextually;
- Providing a theoretical background to the study;
- Reviewing the way by which one establishes the association between what one is proposing to study and what has already been studied. In other words, it helps in improving one’s research methodology.

It also helps,

1. To articulate well and to be focused towards the research problem

   The literature review involves a contradiction. On the one hand, one cannot efficiently undertake a literature investigation without some idea of the problem one wishes to explore. On the other hand, the literature review can play an extremely vital role in determining research problem because the process of reviewing the literature helps to understand the topic area better and thus help to comprehend the research problem evidently and accurately. It also helps to understand the association between the research problem and body of knowledge in that area.

2. To improve upon the methodology

   Going through the literature helps one to get aware with the methodologies that have been used by others to find answers to research questions similar to the one that is being investigated. A literature review tells if others have used actions and
methods similar to the ones that are being planned, which process and methods have worked well for them, and what difficulties they have faced with them. By becoming aware of the problems, one will be better positioned to select a methodology that is able to provide appropriate answers to the research questions. This will increase confidence in the methodology one intends to use and will enable further to put forth reasons for using the same.

3. Broaden the knowledge foundation in one’s area

The most important purpose of the review of related literature is to ensure that one reads widely and deeply around the subject area in which one intends to do the research study. It is imperative that one knows what other researchers have found in regard to the same or similar questions, what theories have been put forward and what gaps exist in the pertinent body of knowledge. Another vital reason for doing a literature review is that it helps one to comprehend how the findings of one’s study fit into the existing body of knowledge.

4. To contextualize one’s result

Finding out answers to one’s research questions is relatively easy: the complicated part is probing how one’s findings contribute to the existing body of knowledge. How do answers to the research questions contrast with what others have found? What contribution has one been able to make to the existing body of knowledge? How are one’s findings different from those of others? For one to be able to answer these questions, one has to revert back to the literature review. (Kumar, 2009, pp.30-31)
Since, Continuous and comprehensive evaluation was introduced by CBSE at secondary level in 2009, no direct studies could be found by the researcher. In the present study, researcher has used various books, dissertations, handbooks, articles, journals, thesis, web sites, as reference material. The researcher after going through the above material reflected upon some broad themes which form the essential components of continuous and comprehensive evaluation for which various Indian and foreign studies have been complied chronologically as follows:

2.2 Theme based Review of Related Literature

The review of related literature has been carried out keeping the following six themes in perspective chronologically:

2.2.1 Review Related to Need for examination reforms

Reddy, R. V. (1961) expressed the need for examination reform wherein he was of the view that the defects of examination system are many but since examinations have come to stay in any scheme of evaluation, some improvements are essential. In order to improve the system of external examination in India, a phased program should be planned in order to introduce certain changes such as improvisation coverage etc. and to prepare test material for school and boards. An orientation program for teachers should be planned for teachers to prepare pupils for improved pattern of external examination and for examiners and paper setters in the techniques of educational evaluation. Brochures, bulletins regarding concept and techniques of evaluation and learning experiences should be prepared and published.
Chatterji, M. (2002) inferred in her study in relation to examination reforms that the age old traditional essay type examination proved a failure. Questions were selective and the approach of the examiner was subjective. These examinations provided ample scope for malpractice. In this study she suggested the decentralization of examination system, less of common examination and more of periodic assessments, more of teachers and students involvement and provision of more chances for the students to make up their deficiencies. The study suggested that the system of gradation would simplify the process of valuation of answer papers considerably and the subjective approach of awarding marks could be checked. To decentralize the common examination it was necessary to introduce the system of question banks where various types of standardized questions could be available for the examination.

Sibbal, K. (2010) supported a paradigm shift in the education system in relation to continuous and comprehensive evaluation to help students express their creativity and make teaching learning exercise more children centric and interesting. He expressed that process of changing the thrust of education has already started. The school environment, curriculum, teachers’ training and teaching method will be changed under this exercise.

Devi, R. P., & Swain, B. C. (2010) examined the need of examination reforms at elementary level. They discussed the shortcomings of the examination system at elementary level and suggested measures for the improvement of the same which included the following: a) common public examination to be held at the end of class VIII; b) varied modes of assessment to be used for formative, summative and diagnostic evaluation; c) Permitting students to make progress at their own pace; d) Improvement in the reporting system for the parents, students and the society; e) Reduction of
examination stress and anxiety by making the examination a continuous process; 
f) Question-setters to reduce long questions, ambiguous questions and set questions not only to test knowledge but other higher order abilities; g) Students should be allowed to appear for the public examination in their home school; h) Examinations should never be postponed; i) Progress reports of students should not reflect the term ‘fail’ but should contain description of their performance; j) Students should be permitted to repeat the test and make progress; k) There should be improvement in paper setting, conducting of examination and its reporting; l) Question-setters should produce the marking scheme which may be edited by the experts and re-edited in the light of students’ performance; m) Institutions and different organizations may develop question banks; n) Conduct of examination should be such that there is no scope for malpractice at any level; o) Transparency and honesty should be maintained in scoring and reporting. DPEP has already outlined a comprehensive scheme of evaluation at elementary level which includes both scholastic aspect (curricular and intelligence), non-scholastic aspect (personal and social quality, interest, attitude, physical health) and activities (literacy, scientific and cultural).

Bhagwan, K. S. (2011) investigated practices in teacher education program. Recently used examination system did not measure the whole aspect of personality but it depended upon only recall & recitation. Due to this written examination, the students were under pressure. Instead of using the written exam approach, the part learning – teaching method i.e. CCE should be used. CCE is multidimensional because it involves multiple techniques and different persons like teacher, pupil, peer, parent, & community etc.
Jain, N., & Saini, S. (2012) threw light on the concept, grading system, types of assessment and guidelines by CBSE in continuous and comprehensive education. They also tried to explore the successful implementation of CCE and its benefits for teachers and students. They expressed that if evaluation is comprehensive, continuous and objective based, then it will help to know the strengths, weaknesses, interests and attitudes of pupil and thus will help in all-round development of the individual as education aims. In the existing conditions of evaluation system carried out in schools, it was felt essential to equip the teachers with necessary knowledge and skills in planning the evaluation tools and in proper assessment of students both in cognitive and non-cognitive areas.

Sharma, S., Pathak, V. K., & Pyari, S. (2012) reflected upon the shortcomings of traditional evaluation system which focused mainly on marks with no place for learners creativity and imagination in examination. The study further talked about the need of introducing continuous and comprehensive evaluation in the present context. They also further attempted to justify the drawbacks of examination and implementation of continuous and comprehensive evaluation as an effective means for achieving the goals of education.

2.2.2 Review Related to Grading System

Burton, F. (1983) studied the grade system and its effect on the curriculum. This study explored and identified patterns of teachers, students, parent, and administrator responses to grade evaluation systems. The study involved an open ended questionnaire, formal and informal interviews, and a survey. The researcher determined that grades influenced the
sustenance of traditional curriculum based on behaviorist theory with a resultant ‘trivialization’ of content. Students associated their worth and value as human beings with their grade focusing their attention on finishing their work rather than on learning. The grade system seems to support a school curriculum shackled by time.

*Mead, J. V. (1992)* carried out study on grading in Washington D.C. In his study “Teachers’ evaluation of student work” he examined the criteria that elementary and secondary mathematics teachers used while assigning grades, the visible mark of a teacher’s evaluation, when shown individual pieces of mathematics work. Results of this study suggested that grading student work is a neglected subject and it appeared to be a distasteful and marginalized teacher activity.

*Nava, F. J., & Loyd, B. H. (1992)* investigated on the achievement and non-achievement criteria in elementary and secondary school grading. For this study a sample of 829 elementary school and high school teachers from 18 school districts was selected. The study revealed the identification of four dimensions of the grading criteria which included classroom behavior and characteristics enhancing the learning process, measure of achievement and academic content, student behavior and non-academic skills and lastly the trait and factors external to the classroom. Clear differences were seen between elementary school and secondary school teacher.

*Bandh, B. H. (1995)* carried out the effectiveness of conventional system and Cumulative Grade Point Average (CGPA). Marks obtained by the students during 1994 to 1999 in B.Ed, examinations were collected from two university records, namely Nagpur University and Amravati University. The total number of students whose marks were collected was nearly six thousand. Records of B.Ed, examinations conducted during
1994-99 and an interview schedule were used to collect relevant data. Mean, SD, chi-square, correlation co-efficient and regression analysis were used to treat the data. The major findings of the study were: (1) Internal consistency was relatively more in the evaluation of written examination than in the practical examination. (2) Correlation co-efficient between marks obtained in theory examination and in practical examination was found very poor. (3) Because the teachers were conditioned to traditional assessment system, a significantly large number of them had not even taken pains in understanding C.G.P.A. scheme. (4) C.G.P.A. gave importance to consistency as a result of which even if a student gets more marks but lacked in consistency, he gets lower grade than the one having less marks but more consistency. (5) Dislike towards C.G.P.A. scheme of assessment was observed as a result of its complexity.

_Bursuck, W., Polloway, E., Plante, L., Epstein, M., Jayanthi, M., & Mc Coneghy, J. (1996)_ conducted a study on “Report card grading and adaptations: A National Survey of Classroom Practices.” It was a national survey of elementary and secondary general education teachers (n=368, response rate of 52%) that examined classroom grading practices, including grading adaptations for students with disabilities. Results of this survey indicated that teachers found certain adaptations (pass-fail grades, portfolios, multiple grades, and grading for effort) useful for students both with and without disabilities.

_Ramadas. V., & Divya, T. (2007)_ directed their attention towards grading in schools to 1) analyze the knowledge, attitude and practices of elementary school teachers on grading system, 2) analyze the relationship among knowledge, attitude and practices of the teachers on grading, and 3) identify the problems faced by the teachers in implementing
the grading. A stratified sample of 186 elementary school teachers was selected from 14 schools in the Kannur and Palakkad districts of Kerala. The statistical techniques employed for the analysis were percentage and t-test. The major findings of the study were: 1) Most of the teachers possessed substantial knowledge about the system of grading being implemented in Kerala. However, a considerable number of them still needed to understand the new system properly. 2) The teachers had high appreciation for the grading, but they did not accept it wholeheartedly as most of them were neutral in their attitude towards the implementation of the new system. 3) A considerable number of the teachers faced difficulties in assessing student’s performance as desired by the grading system.

DataManion Research Analyst (2008) conducted a study on the effectiveness of school grading system in developing classroom management and school management for Uttarakhand. The study covered all 13 districts in the state. From each district 50 schools were selected. Data was collected through questionnaires, interviews and group discussions from head-teachers, Village Education Community (VEC) members, Block Resource Center (BRC) and Cluster Resource Centers (CRC), District Institute of Education and Training (DIET) mentors, teachers and children. The results of the study revealed that all block resource centre members were aware of the grading procedures and were of the view that total procedure need to be simplified to reduce time required for it. In most of the places, cluster resource centre was doing the academic grading. School found this exercise useful. However, teachers (above 70%) were aware of the system, procedures, involved partners and role of CRC’s in the academic and physical assessment. VEC and school management communities’ participation ranged from 55-
80% across the districts. Students’ low performance particularly in mathematics was a cause of concern amongst CRC coordinators. More teachers training would help regular and para-teachers in undertaking remedial teaching for weak students and their efforts to stimulate parents’ interest in education of their wards.

Siemat (2008) carried out a study on grading: innovation in quality monitoring. The study was undertaken in four districts- Agra, Allahabad, Jhansi and Lucknow of Uttar Pradesh. Data was collected from headmasters, teachers, block resource centre coordinators and DIET mentor connected with the sample schools support and supervisory functionaries through questionnaires, interviews and discussions. The data was also collected from secondary sources-Government orders. The main findings of the study were that the schools were evaluated on five indicators- infrastructure, community support, enrolment & attendance, teaching in classrooms and evaluation of students on basis of their marks in examination. The analysis showed that there have been two major shifts in the process of school grading. One was in year 2003 and the other in 2006. Regular academic support and supervision were perceived to have improved the functioning of schools and classroom processes as well as achieving better academic levels amongst children. The intervention of school grading was perceived by the school fraternity as an appropriate tool for self-assessment and self-improvement. DIET mentors reported that school grading has been successful to quite an extent in achieving its objective of improving quality education in schools. All head-teachers and teachers acknowledged that BRC and CRC coordinator were providing regular academic support to them. Head-teachers and teachers perceived grading procedure as responsible for improving the school environment, be it infrastructure, classroom processes or student performance. School
level stake holders responded positively and were feeling more accountable. According to teachers (90%) results helped in identifying weak and underachieving students, as well as locate hard spots in the curricular areas and helped in planning corrective action through remedial teaching. Parents and community were aware of school grading (90%). However, grading had not affected community support or their participation in school functioning. Parents reported that students’ achievement levels had also improved.

_Lajwanti, & Kumar, P. (2012)_ carried out the study to compare both the evaluation system i.e.; grading and marking evaluation system, on the levels of examination stress and achievement motivation of the students. The study reported that the evaluation system lays an effect over the students on the levels of examination stress and achievement motivation. The numerical marking system (traditional system) had a direct effect on the examination stress of the students. It increased the pressure and stress among the students during the exam time, and thus, resulted into their poor academic achievement, which further lead to severe consequences and dangerous steps taken by the students. Whereas on the contrary the grading system of evaluation puts minimum examination stress, and thus, the students could perform better and yield best results. Similar is the case with the achievement motivation. Since the examination stress is minimal in case of grading system of evaluation, the achievement motivation might be higher in the students studying under this system Central Board of Secondary Education (CBSE) Board schools.

_Maheshwari, A. (2012)_ analyzed the need, importance and broad overview of the grading system, with the merits and demerits and types of grading. She emphasized that grading is a means of reporting the result of evaluation, in which the evaluation is often reported
on the basis of the predetermined standard, expressed in the symbolic form i.e. letters of the English alphabets. It was considered superior to the traditional marking system as it indicated the quality of performance, ensured greater uniformity in the assessment, facilitated better comparability of students’ performances, facilitated migration of students from one university to another and enabled students to make correct choice of subjects in accordance with their abilities.

*Mishra, J. K., & Behera, K. (2012)* emphasized on the advantage of grading system over marking system which were experimented in two primary schools in Koraput district of Odisha. The investigators considered grading system suitable from various angles in order to waive biasness and differentiation in the traditional system of marking, examination phobia and rigidity. Differentiation in awarding marks for same answer was based on the mood of the examiner and the students expressed their discontentment over it. RTE Act 2009 emphasized on evaluation system which must be continuous and comprehensive and learner friendly. The investigators conducted a small study consisting of fifty students from one school and fifty students from another school of the same locality. One group of students was awarded marks and another group of students was awarded grades. Evaluation tools like question papers, observation schedule, checklist, rating scale were used to assess the learners’ performance of the students of class-V in Geography. Then assessment was made and it was revealed from the findings that 75% of the students put under grading system expressed their pleasure in favor of grading system whereas 70% of the students expressed their discontentment that were put under marking system. Thus it was proved that grading system was conducive for assessment of learners’ performance.
Narang, R. (2012) focused on the perception of students in relation to the grading system at the level of secondary education. The sample consisted of fifty students. Mean, standard deviation and critical ratio were calculated. A questionnaire of grading system was prepared by the researcher. Significant difference was not found between fresher students and pass out students at 0.01 level of significance so null hypothesis was accepted at 0.01 level of significance. While significant difference was found between fresher students and pass out students at 0.05 level of significance so null hypothesis was rejected at 0.05 level of significance.

Raj, H., & Upadhyay, A. K. (2012) explained “why grading system is need of present time?” and “what is present scenario of grading system in different nations?” The authors also highlighted some drawbacks of grading system and “how can we eliminate these drawbacks and make the grading system more effective?” They discussed some suggestions i.e. peer group collaboration, faculty discussion and student involvement in deciding learning goals, proper selection of assignments, tests and activities etc. and by using the above, grading system can be used more efficiently and thereby assess the whole personality of learners.

2.2.3 Review Related to Types of Assessment

Sharma, M. L., Mullick, S. P., & Shah, C. Z. (1977) emphasized on formative and summative evaluation in education and concluded that evaluation is the means whereby one systematically collects and analyze information about the results of students encounter with the learning experiences. Thus, evaluation can provide useful data both for improvement of teaching and enhancement of learning. The evaluation
which pertains to the teaching-learning process is referred to as formative evaluation and that connected with the quality of learning is called summative evaluation. However, the two are so interrelated that it is difficult to differentiate between formative and summative evaluation. In fact, they are supplementary and complimentary to each other in the whole enterprise of evaluation. These are known as micro and macro evaluation. The formative evaluation begins at the curriculum construction stage and cuts across the total try out stage. It not only permeates curriculum construction and its try outs, but also covers teaching and learning processes. Continuous assessment of the students by a teacher with a view to revise the teaching process is an example of formative evaluation. Many a time a student himself is in charge of his learning process. Formative evaluation enables a student to locate his difficulties and provides feedback.

Harlen, W; & James, M. (1997) concluded that formative and summative purposes of assessment have become confused in practice and that as a consequence assessment fails to have a truly formative role in learning. The importance of this role is argued particularly in relation to learning with understanding (deep learning). It is pointed out that the requirements of assessment for formative and summative purposes differ in several dimensions, including reliability, the reference base of judgments and the focus of the information used. This challenges the assumption that summative judgments can be formed by simple summation of formative ones. An alternative procedure for linking formative and summative assessment is proposed such that their separate functions are preserved.
Black, P., & Wiliam, D. (1998) conducted a review of the literature on classroom formative assessment. Several studies showed firm evidence that innovations designed to strengthen the frequent feedback that students receive about their learning yield substantial learning gains. The perceptions of students and their role in self-assessment were considered alongside analysis of the strategies used by teachers and the formative strategies incorporated in such systemic approaches as mastery learning. There followed a more detailed and theoretical analysis of the nature of feedback, which provided a basis for a discussion of the development of theoretical models for formative assessment and of the prospects for the improvement of practice.

Boston, C. (2002) investigated the benefits of formative assessment and provided examples and resources to support its implementation. While many educators were highly focused on state tests, it was important to consider that over the course of a year, teachers can build in many opportunities to assess how students are learning and then use this information to make beneficial changes in instruction. This diagnostic use of assessment to provide feedback to teachers and students over the course of instruction he called was formative assessment. It stands in contrast to summative assessment, which generally takes place after a period of instruction and requires making a judgment about the learning that has occurred (e.g., by grading or scoring a test or paper).

William, D., Harrison, C. L., & Black, P. (2004) found out that the increased use of formative assessment (or assessment for learning) lead to higher quality learning as it is often claimed that the pressure in schools to improve the results achieved by students in externally-set tests and examinations precludes its use. A total of 24 teachers (2 science and 2 mathematics teachers, in each of six schools) were supported over a six-month
period in exploring and planning their approach to formative assessment, and then, beginning in September 1999, the teachers executed these plans into action with selected classes. In order to compute effect sizes, a measure of prior attainment and at least one comparison group was established for each class (typically either an equivalent class taught in the previous year by the same teacher, or a parallel class taught by another teacher). The mean effect size in favor of the intervention was 0.32.

Johnson, K. A. (2008) conducted a descriptive research study to examine formative evaluation procedures for professional development used by selected Pennsylvania schools and their relationship to student achievement. Data were acquired through public records and a two-part paper and pencil survey sent to 220 principals of buildings that house eighth grade, posted test scores each year from 2003-2006, and demonstrated statistically significant changes in scores over that four year period. Purposeful stratified sampling with two cases of variation for school achievement, advancing schools and static schools, was used. It was inferred that many procedures were employed to evaluate professional development. Methods to evaluate participant reactions to activities were more prevalent than all other levels of evaluation practice. Advancing schools demonstrated significantly higher use of professional development standards for evaluation than static schools. There were no statistically significant differences between the two school groups on Guskey’s five evaluation levels. Based on evidence produced in the study, the hypothesis that there is a positive correlation between the level of formative evaluative practice used by schools for professional development and the growth in their student achievement as measured by Pennsylvania state assessment scores was rejected.
Dunn, K. E., & Mulvenon, S. W. (2009) showed that formative assessment directly contributes to positive educational outcomes. The use of formative assessments, or other diagnostic efforts within classrooms, provides information that would help facilitate improved pedagogical practices and instructional outcomes. However, a review of the formative assessment literature revealed that there is no agreed upon lexicon with regard to formative assessment and suspect methodological approaches in the efforts to demonstrate positive effects that could be attributed to formative assessments.

Myricks, N. B. (2009) studied the perspectives of school principals regarding the evaluation of marginal teachers in Georgia. The purpose of the study was to find out how principals use formative evaluation and how they perceive its usefulness to assist marginal teachers. This research consisted of two stages: mail questionnaires and telephone interviews. The participants in this study included 25 principals who completed the mail questionnaire. Of these participants, five principals were interviewed during stage two of the study. The researcher employed a questionnaire to gather a snapshot of the participants’ opinions about the usefulness of teacher evaluation. Interviews provided data about participants’ experience with the formative evaluation process and its use with marginal teachers. Principals acknowledged that teacher evaluation is useful in assisting marginal teachers. This research inferred that principals’ responses to marginal teachers depended on the type of marginal teachers that were encountered. The overall findings of this study revealed that the majority of the principals surveyed and interviewed agreed that teacher evaluation is useful to improving the learning experiences for all students, the learning environments, and teachers’ knowledge.
Bennett, R. E. (2011) reported (aka, ‘assessment for learning’) issues concerning the definition of formative assessment and concluded that the term, ‘formative assessment’, does not yet represent a well-defined set of artifacts or practices. Although research suggested that the general practices associated with formative assessment can facilitate learning, existing definitions admit such a wide variety of implementations that effects should be expected to vary widely from one implementation and student population to the next. To realize maximum benefit from formative assessment, new development should focus on conceptualizing well-specified approaches built around process and methodology rooted within specific content domains incorporating fundamental measurement principles that encourage teachers and students to recognize the inferential nature of assessment. Finally, for greatest benefit, formative approaches should be conceptualized as part of a comprehensive system in which all components work together to facilitate learning.

Clark, I. (2010) showed that in recent years, a growing political emphasis has been placed upon the development of transformative assessment-driven reform in schools. There is global consensus on the value of assessment activities that are carefully designed to be consistent with desired learning outcomes, and which coherently connect learning theory, the curriculum, classroom activities and assessment. The study investigated the large-scale transformation of classroom practice in the Scottish region of the UK, known as Project1 which began with a summary overview of Project 1 and continued with a conceptual discussion of formative and summative assessment. The key architectural principles underpinning formative assessment in practical settings were also discussed followed up by the professional evaluations of Project 1 by participating teachers.
McMillan, J. H., Venable, J. C., & Varier, D. (2013) reported that Kingston and Nash (2011) recently presented a meta-analysis of studies showing that the effect of formative assessment on K-12 student achievement may not be as vigorous as widely believed. This investigation analyzed the methodology used in the Kingston and Nash meta-analysis and provided further analyses of the studies included in the study. These analyses suggested, consistent with other reviews, that some of the conclusions reached by Kingston and Nash may not be credible. The studies used in the Kingston and Nash meta-analysis were limited by the nature of the selection process, the questionable quality of their methodologies, and the multiple ways formative assessment was defined and operationalized, often without inclusion of recognized formative assessment characteristics that are needed for successful practice. These limitations alleviated Kingston and Nash’s conclusion that the median effect size of experimental studies reviewed suggested a much smaller overall impact than reported by others. Recommendations for further research in this area were summarized to establish an improved body of literature on the effects of formative assessment on student achievement.

2.2.4 Review Related to CCE at Primary Level

Rajput, S., & Agarwal, M. (1996) highlighted the importance and significance of evaluation at the primary school stage as a device for quality improvement. The study aimed to identify the process and procedures of evaluation practices adopted in primary schools of Delhi. The sample constituted 25 schools viz. government aided, MCD, New Delhi Municipal Corporation (NDMC) schools, Kendriya Vidyalayas (KV’s), Private
public schools and unrecognized schools. Questionnaires and investigation diary were
used for gathering information on instructional practices and question papers of class II
and report cards were collected for the purpose of analysis. The collected data were
analyzed qualitatively. The results showed that all the schools had a well designed system
of evaluation. Weightage given to different tests and examinations were more or less
same in all the schools except in KV. More weightage was given to knowledge than to
understanding and skill. Private and public schools gave more attention to assignments,
project work and oral work than the state run schools. Adequate attention was not paid on
evaluating the non-scholastic areas of performance.

Delandshere & Jones (1999) carried out a qualitative study aimed at identifying
elementary teachers’ beliefs about assessment. At the completion of 14 individual
interviews with the three participants over a three month period, the researchers engaged
in an analytic induction process generated a set of assertions that emerged from the data.
They determined three participants’ assessment views as predominantly summative and
external in nature. Teacher interview responses regarded assessment as “a required means
of conveying information to external audiences (parents, district, state, other teachers),
and rarely as a way to understand learning and inform teaching” (p. 229). Teachers’
perceptions of externally defined assessment pedagogy, limits their assessment practices
to summative approaches that imitate the state and federal-mandated testing. As an
unintended consequence, Delandshere and Jones pointed out “teachers are left
dissatisfied and unable to learn about their teaching or how their students learn” (p. 238).
Additionally the researchers deduced that teachers’ assessment practices play an integral
role in the preservation of their conceptions about assessment and its functions and usefulness.

Rao, M. (1998) inferred that evaluation practices carried out in schools are still conventional in their nature and purposes. After getting orientation the teachers are not yet conducting continuous comprehensive evaluation in actual classroom situation. The evaluators’ biasness was highlighted clearly. Formative feedback was not provided and learning difficulties were also not identified. The personal and social qualities were totally ignored due to lack of the knowledge of the evaluator on what to be evaluated and how to evaluate.

Rao, M. P. (2001) conducted a study in relation to the impact of continuous and comprehensive evaluation over the evaluation practices of primary school teachers. This study dealt with the role of continuous and comprehensive evaluation (CCE) which is considered as very important when our aim is to improve learner’s quality not only in the school subjects but also in their personal and social aspects. In this study, an attempt was made to study the impact of training program on continuous and comprehensive evaluation over the evaluation practices of primary school teachers. In pursuance of this, it was intended to: study the evaluation practices of teachers before implementing the training program of continuous and comprehensive evaluation by using the developed training package; and study the impact of continuous and comprehensive evaluation practices of teachers such as questioning skills, testing, recording and reporting procedures.

Trepanier-Street, M. L., McNair, S., & Donegan, M. M. (2001) analyzed 298 participants’ responses and concluded that in addition to being aware of a broad range of
assessments, teachers also reported use of varied assessment techniques. Specifically, both lower and upper elementary teachers used and valued similar assessment measures; however, some differences and preferences were evident as he indicated that lower elementary used and valued one-on-one assessments, written observational notes, and checklists, ratings scales, and portfolios, while upper elementary teachers placed greater emphasis on paper-pencil assessments, teacher-made tests, conferencing with students, and tests published from reading series and textbooks. Trepanier-Street et al. suggested that differences between the groups may be due to the developmental levels of the students they were teaching.

McMillan, J., Myran, S., & Workman, D. (2002) used a 6-point Likert scale to survey 901 third through fifth grade elementary teachers regarding their individual assessment and grading practices. He indicated that rather than relying upon a singular form of assessment, third through fifth grade teachers embrace various tools and techniques to assess math and language arts. For example, the researchers noted objective assessments as the most frequently used assessment for both subject areas (math mean of 3.43 and language arts, 3.43), with performance assessments (mean of 3.43) and projects (mean of 3.59) used almost as regularly as objective assessments in language arts. Mathematics responses included less reliance upon performance and project assessments (means of 2.84 and 2.51, respectively). Mathematics and language arts data indicated greater use of teacher-made (means of 3.63 and 3.90, respectively) and publisher supplied assessments (means of 3.54 and 3.22, respectively). The standard deviations (approximately 1 point on the scale) documented noteworthy variation within elementary teachers’ assessment practices.
Smita (2002) found that CCE demanded change in strategies on the basis of the outcomes continuously and tailored them to the needs of individual children on the part of the teacher. The principal and the teachers should develop an action plan indicating the scheme of evaluation, identifying the task and role of different activities and their time schedule, mode of implementation and feedback mechanism along with remediation strategies.

McNair, S., Bhargava, A., Adams, L., Edgerton, S., & Kypros, B. (2003) explored assessment practices of 157 elementary teachers from Southeastern Michigan to determine use of varied assessment tools. He conducted follow-up interviews to document “the types, frequency, and utility of assessment techniques used by classroom teachers.” The study addressed results associated with paper-and-pencil tests, observations, checklists, and portfolios. Differences between pre-kindergarten and elementary teachers, pre-kindergarten through second grade, and teachers at grade three and higher revealed that the frequency with which tests are used differs significantly by grade, specifically paper and pencil tests. Additionally, the results indicated a significant difference between the two groups for the source from which the tests were obtained (own, commercial, or both) and used (formative or summative). Data also revealed that the utility of paper-and-pencil tests did not differ by grade level since 92% in lower grades and 98% in upper grades related their use of these tests to summative purposes. Results for checklists and portfolios indicated no significant difference between frequency of use. Teachers in both grades frequently used checklists but indicated their preference for self-created tools. Additionally, results documented that despite checklists and portfolios traditional association with formative assessment, participants in the study
used these tools primarily in a summative manner for the purpose of external accountability and reporting. Despite observation’s essential role within a valid assessment system, the results of this study indicated that this assessment tool is primarily being used for a summative purpose rather than formative. Although participants within the study indicated observation was a favored assessment strategy, the data revealed it was most often used to gather behavioral data rather than academic (73% of early level teachers and 76% of grade 3-4). Pearson’s chi-square analyses yielded no significant differences between the two groups’ frequency of use and utility of observations however, a discrepancy between teacher comments and interview question responses revealed potential for greater identification with a formative assessment pedagogy, but a lack in understanding and implementation of assessment techniques that supported the “improvement conception”.

**Rajput, S., Tewari, A. D., & Kumar, S. (2003)** studied the development and implementation of school based evaluation scheme. A scheme of school based evaluation based on the concept of continuous and comprehensive Evaluation, was developed and implemented on 1000 primary students (Classes I-V) in four demonstration multipurpose schools attached to Regional Institutes of Education located at Ajmer (Rajasthan), Bhopal (Madhya Pradesh), Bhubaneswar (Odisha) and Mysore (Karnataka) of the NCERT with a view to develop and work out a feasible scheme of evaluation. All fifty teachers working in the selected schools were given intensive training before the commencement of the program regarding implementation of the scheme. The major findings of this study revealed that the teachers’ work increased at the initiation of scheme but it came down to an acceptable level once they understood the intricacies of the scheme. Teachers used
variety of techniques for assessment of students’ performances. Diagnostic and remedial instructions were found effective in improving students’ performance. Students’ performance improved steadily in co-curricular activities. Assessment of social and personal qualities developed awareness among the students and parents, students became more disciplined in school. Continuous monitoring helped teachers in strengthening their understanding of various techniques of evaluation. Non availability of competencies based text books, well defined competencies in co-curricular areas, exemplar materials for systematic development of social and personal qualities and insufficient activities for development of skills in health, physical education, art education and work experience were some of the lacunas identified during the course of implementation. Teachers needed training in preparing formal diagnostic tests and remedial exercises.

Baskaran, S. H., Sadatcharavel, N. & Baskaran, D. (2005) investigated an awareness program for the teachers at primary level, for being conversant with effective evaluation techniques and to know the level of evaluation concept attained by the teachers at the primary level; and to find out learners gains in academic performance after promoting the awareness of teachers towards evaluation techniques. The sample for the study consisted of 60 teachers serving in 15 middle schools in Aruppukottai educational district. The tools for the study were a) evaluation concept attainment scale and b) achievement tests in respective subject. The teachers were instructed to administer a pre-test on subjects for students of class standard VI. To find out the effectiveness of the concept attainment, a post-test was administered on the students after an awareness program was conducted for the teachers. The results of the study revealed that there was a significant difference
between the mean scores of academic performances of the students belonging to private schools and public school.

Rajput, S., Tewari, A. D., & Kumar, S. (2005) carried out a feasibility study of continuous comprehensive assessment of primary students. The Department of Educational Measurement and Evaluation (DEME) of the National Council of Educational Research and Training (NCERT), New Delhi, India prepared a scheme of assessment for primary classes based on the concept of continuous and comprehensive evaluation. This scheme was finalized by an expert group before actual tryout. Primary teachers teaching in experimenting schools were oriented thoroughly regarding various aspects of the scheme before its implementation. Necessary modifications in various instructional aspects were added along with a monitoring mechanism. Subsequently the scheme was tried on students studying in primary classes of four schools for one full academic session. Implementation of the scheme revealed that it is feasible in primary schools. Teachers, students and their parents have found the scheme very useful and practicable for assessment of children's all-round development.

Rao, M. P. (2006) studied the impact of training in continuous and comprehensive evaluation on the evaluation practices of teachers of primary schools in Tamil Nadu. In this study, an attempt was made to train the primary school teachers in the continuous and comprehensive evaluation and to research upon its effectiveness. In pursuance of this, evaluation practices of teachers before implementing the training program of continuous and comprehensive evaluation; training the teachers in continuous and comprehensive evaluation by using the developed training package; and to study the impact of continuous and comprehensive evaluation on the awareness and the classroom evaluation
practices of teachers such as questioning skills, testing, recording and reporting procedures was intended for conducting the study. The tools used in this study were teachers’ schedule, checklist for questioning skills and classroom evaluation schedule. The study was carried out into three phases which included the development of modules on continuous and comprehensive evaluation; training of teachers by using the training material, and follow-up activities to study the impact of continuous and comprehensive evaluation training program. The results of this study revealed that the teachers had improved their questioning skills in the classrooms and other evaluation practices pertaining to scholastic areas and personal and social qualities of students which were continuous and comprehensive in nature.

**Remesal (2007)** conducted research consisting thirty primary (30) and twenty (20) secondary teachers’ conceptions of assessment. He chronicled assessment in the Spanish educational system through the use of qualitative techniques to individually interview fifty teachers (thirty primary and twenty secondary). In addition to the interviews, the researcher conducted a content analysis of assessment materials determined by the participants to be representative of their typical classroom assessment practices. The results indicated that primary teachers assumed the pedagogical conception of assessment (60% [=20% +40%]), either extreme or mixed, with similar conceptions remaining more rare among secondary educators (10%). 75% of secondary teachers demonstrated inclination toward the accounting conception ([=45% = 30%]), while similar conceptions appeared only 40% [=33.33% + 6/67%] among primary.

**Rao & Rao (2008)** inferred that primary school teachers were not doing continuous assessment systematically, not identifying the learning difficulties and remedial
instruction was not provided. It also revealed that teachers were recording against the
each student’s performance and activities just to satisfy the supervising and inspecting
authority. Such findings about the teachers were probably due to lack of awareness about
CCE among the teachers as it was not implemented in all areas.

*Bhattacharjee, A., & Sarma, N. (2009)* studied the status of co-scholastic activities in the
school program of the elementary schools. The sample of the study consisted of 50
elementary schools from three educational blocks of the district. Primary data was
collected through interview schedule, observations recorded in the invigilator’s diary,
focused group discussions with the respondent teachers of the sample schools and
interview with various school functionaries. The study revealed that co-scholastic
activities have not earned a proper place in the school routine. The teachers did not have
any kind of formal training to handle the co-scholastic activities. There was also no
evaluation of these activities either half yearly or annually. Co-scholastic part of the
curriculum was totally ignored in the school program.

*Fery, C. A. (2009)* conducted embedded case study in k-12 urban ring schools of a mid-
size city in Rhode Island. The study aimed to find out- how do elementary middle and
high school teachers described formative and to what extent they are able to implement
formative assessment strategies in their classrooms. The study found that, even though
the teachers can define summative and formative assessment, they demonstrated a lack of
deep understanding with regard to how these forms of assessment can be used to improve
student learning.

*Jett, P. M. (2009)* studied teachers’ valuation and implementation of formative
assessment strategies in elementary science classrooms wherein elementary school
teachers in one school district were surveyed by means of a questionnaire to ascertain their perspectives on value and implementation of formative assessment. This study indicated that those who had a more student-focused or constructivist approach to science teaching, were more likely to effectively use a wider variety of formative assessment strategies in their instruction.

_Nabis, M. I. (2011)_ investigated about views, obstacles and new thoughts of primary teachers regarding continuous and comprehensive evaluation. The main objectives of the study were: 1) To study the views of the primary teachers regarding the implementation of continuous and comprehensive evaluation in schools; 2) To identify the obstacles and remedial measures in the implementation of continuous comprehensive evaluation at school level. For the current study 20 experienced primary teachers in academic year 2010-11 were selected purposively from Chandgad Taluka. For the present research survey method was used. Questionnaire was used for data collection. Percentage, tabulation and graphs were used for data analysis. The main findings of the study were: a) Continuous and comprehensive evaluation was useful to understand the overall progress of student; b) With the help of continuous and comprehensive evaluation, students quantitative and qualitative analysis was possible; c) Continuous and comprehensive evaluation was stress less; d) Continuous and comprehensive evaluation was useful for skill development and overall evaluation; e) Student becomes active with this process; f) It was difficult for all the teachers to maintain records; g) It was time consuming process for the teachers; h) There was lack of knowledge about implementation of continuous and comprehensive evaluation. It was difficult to develop tools and conduct continuous and comprehensive evaluation.
**Indrani, & Singh, A. (2012)** focused to find out the strength and weak points of CCE system and to compare the opinion of teacher’s having training and without training in using CCE system of evaluation. Sample consisted of teachers teaching 6\(^{th}\), 7\(^{th}\) and 8\(^{th}\) class in CBSE affiliated schools of Ghaziabad. 60 teachers from four schools were selected through random cluster sampling technique. Findings revealed that a) There was no significant difference between opinion of trained and untrained teachers regarding CCE system of evaluation; b) 68% of teachers had the opinion that teachers have sufficient knowledge regarding implementation of CCE system; c) 80% teachers agreed with positive effect of CCE system on learning and achievement of students; d) 79% teachers had the opinion that this system encouraged activity based teaching and had large scope of regular feedback from students and more opportunities for remedial teaching side by side. e) Major advantages of CCE system were decreased anxiety of examinations among students, enhancement of creativity, making teaching learning process more student centric, use of various evaluation techniques, teacher taught relationship more positive, comprehensive evaluation of students’ personality in the opinion of teachers. f) Major limitation or disadvantages of the system were that it is more labor demanding, sometimes students are unnecessary busy in the project work, having difficulty in ranking the students under this system, evaluation of co-scholastic area is difficult, ample opportunity of favourism, difficulty in maintaining the records of students in the opinion of most of the students g) 83% teachers felt the need of further training for the better implementation of CCE system.

**Kothari, R. G., & Thomas, M. V. (2012)** concluded evaluation as a powerful means of improving the quality of education. As emphasized by Kerala Curriculum Framework
(2007) the implementation of new evaluation practices focusing on CCE was introduced right from primary to secondary level. Though the state had made all-out efforts to implement CCE in its true spirit, the questions that remain unanswered were that whether CCE has been actually and effectively implemented in all classes, what problems were being faced by teachers while implementing CCE. The present study was a brief attempt made in this regard and was directed towards answering these questions and giving suggestions for the same. The study was conducted on teachers of upper primary government schools of Kerala. The findings revealed a lot of practical problems being faced by the teachers in relation to time, lack of awareness, lack of infrastructure, beliefs of teachers’ and administrative support.

*Mishra, L. K. (2012)* studied in relation to the system and practices of evaluation at elementary stage of education in the district of Koraput with reference to continuous and comprehensive evaluation. A case study was conducted on selected Government schools of the district to study the real practice of evaluation and examination at primary school level. Teachers, parents and students were interviewed on different components of present evaluation system of the school and the data was analyzed to know the strengths and weaknesses of the system. Examination records and progress cards were also verified and analyzed to comprehend the system of evaluation. Though continuous and comprehensive evaluation was not getting implemented as embodied in the guideline but the existing system of evaluation will lead towards the fulfilment of certain goals of continuous and comprehensive evaluation at elementary stage of education.

*Mohapatra, P. (2012)* observed the issues, concerns and practices of student evaluation at elementary levels being followed in Delhi Public School, Damanjodi located in a
culturally rich, backward district Koraput, Odisha. The assessment system followed in the school was strictly according to the guidelines issued by the CBSE, New Delhi. The study revealed that introduction of CCE had caused a stress free environment by providing the scope to rectify the lacunae of learners unlike building severe examination pressure at the end of the session. It was also found that group assignments developed cooperation and sharing habits among pupils which was a positive social need of the hour.

Panda, B. K. (2012) attempted at understanding the assessment and evaluation methods adapted in the ashram schools meant for the scheduled tribe children in the state of Chhattisgarh. The results revealed that looking at the importance of the process of assessment and evaluation in the schools, it is very much essential for the education departments to provide training to the teachers in the process of evaluation which can cover subject wise as well as class wise assessment methods. Keeping in view of the constraints the tribal children face in learning a new language which is not of their own and understanding what the teachers teach, the assessment procedures should be developed according to the context of the tribal children and due importance to the backwardness of the habitations also has to be taken into account, then only the performance of the learners can be improved and they can be able to compete along with the general population in various public examinations and competitive examinations. Thus the role of a proper assessment and evaluation procedure is very important for effective teaching learning process in the tribal schools which should be in accordance with the context of the school where it is located.
Panda, B. N. (2012) conducted a study to find out the status of CCE at elementary stage in the State of Odisha with the following objectives: 1) To study the opinion of head teachers on status of continuous and comprehensive evaluation in the elementary schools of Odisha; 2) To study the awareness of the elementary school teachers of Odisha about continuous and comprehensive evaluation; 3) To study the attitude of the elementary school teachers of Odisha towards continuous and comprehensive evaluation; 4) To study the views/opinion of the elementary school students of Odisha about the issues in the implementation of continuous and comprehensive evaluation system; 5) To study the awareness of the parents/community members of Odisha about the system of continuous and comprehensive evaluation. This was a survey type research and was designed to collect data from different types of schools (area and grade wise), teachers, parents/community members, students and district education officers using different tools and techniques. Twelve elementary schools having classes from I-VIII were selected using stratified random sampling technique from 03 districts namely Balasore, Khurda and Sambalpur covering 06 urban and 06 rural blocks with 08 multigrade and 04 monograde schools. Twelve Head teachers, 61 teachers, 58 parents and 110 students were selected for the study. The findings revealed that 42% of the teachers did not appreciate the scheme of CCE, while about 60% of the teachers had moderate appreciation for the scheme. None of them accepted it wholeheartedly. The teachers of different elementary school of Odisha were 59% aware about the CCE. The area wise difference in the awareness level of teachers showed that rural teacher were better aware (71%) towards CCE as compared to the teachers of urban areas (58%), when the gender wise difference in the awareness level of the teachers was studied, it
was found that there is not much difference in the awareness level of the male and female teachers as the scores are very closer to each other. It was also found that the monagrade teachers are less aware (55%) then the teachers of multigrade school. If the suggestions are implemented within a given time frame then it is hoped that the implementation of CCE will be functionally meaningful and the impact on the system will be optimal.

Anh, P. L. (2013) conducted a case study to reveal the extent to which current assessment practices in several primary schools in Ha Noi, Vietnam facilitate learning. Focused classroom observations and informal interviews were conducted in 7 primary schools, with a total of 29 class hours. The observations were conducted over a two-year period in three primary schools in Ha Noi. The findings revealed that firstly, current assessment practices were very much embedded within the traditional culture of examinations and testing. Secondly, current assessment practices have not succeeded in helping children become aware of their own strengths / weaknesses and to learn to monitor their own/ their peers’ progress. Thirdly, teachers neither regularly document the planning of assessment activities nor do they record evidence of children learning instead, they merely present/ have an overall informal or anecdotal impression of children’s learning. In the end, she recommended some practical suggestions which may partly facilitate learning namely the importance of daily lesson planning, the simultaneous focus on the three components of FA (i.e., identification of student learning, feedback and feed forward to that learning, and consequent remedies), and considerations of the actual teaching and learning contexts.
Naidu, N.T. (2013) investigated to know the implementation of CCE in schools. The main objectives of the study were: 1) To know the perceptions of teachers on the implementation of CCE at elementary level; 2) To find out whether there are any differences in the perceptions of the teachers towards the implementation of CCE procedures at elementary level with respect to their gender, locality, type of school management, age, teaching experience, and educational qualifications; 3) To examine the effectiveness of CCE procedures in evaluating students at elementary level. Sixty teachers working in elementary schools of Visakhapatnam district in Andhra Pradesh were selected as respondents through simple random technique. It was found that majority of teachers working in elementary schools were not fully aware of assessment practices and tools of CCE for effective implementation. Significant differences were found in the scores of the perceptions between different categories of teachers towards the implementation of CCE in elementary schools.

Velugu, B. (2013) presented an interpretation of CCE and its practice in the rural schools run by Rishi Valley Education Centre. A pedagogical system called MGML methodology is used in these schools. CCE is an integral part of this methodology. How is CCE interpreted and integrated into the classroom process? Does it bring a qualitative improvement in education, through a reflection on teaching process and the whole curriculum design? These were some of the questions the study attempted to respond to by examining CCE in MGML and studies of assessment practices in MGML-based program. Results revealed both pros and cons are associated with the implementation of CCE in relation to MGML methodology.
Chopra, V., Dutta, I., & Bhatnagar, A. (2014) investigated elementary teachers’ assessment beliefs and practices which included classes 3rd to 5th grade primary teachers across Delhi. The participating ten private schools collectively had 100 teachers of which 60 responded to the survey. These schools were selected through the technique of purposive sampling. The study made use of standardized questionnaire by Sarah B. Calveric. The findings revealed that majority of the teachers believe assessment to mean accountability of schools, students and leading to improvement in the teaching-learning process. But most of the teachers were not in favor of differentiated instruction for children with special needs. In relation to practice, majority of the teachers considered major exam as very important practice in classroom assessment. They held that they were still not aware regarding alternative assessment practices.

Mufeed, G., & Ali, S. (2014) explored the school based assessment at elementary level to a) To study the notion of teachers regarding school based assessment; b) To study different means of school based assessment used by teachers; c) To study the purpose for which school based assessment is done. The sample comprised 15 public schools and 30 teachers selected on the basis of random and convenience based sampling. Interview schedule was used for collecting the data from the teachers. The major findings revealed that teachers considered purpose of assessment was to improve teaching learning process and ultimately to gauge the extent to which the capabilities of learners have been developed. They also expressed that well designed assessment and regular reporting provide learners with feedback and encourage them to learn further. Though teachers observed the progress of their students regularly on informal basis but at the same time
felt the need for some new alternative assessment techniques and periodicity in evaluation so as to enable them to reflect upon the information collected about learners.

Srivastava, K. (2014) explored critical perspective with regard to the practices of continuous and comprehensive evaluation in upper primary classes. The present research attempts to analyze the scheme of CCE and its implementation through the lens of the critical theory. The broad themes under which the CCE scheme was analyzed were: Assessment and social control, assessment and merit, and assessment and the market. To understand the implementation of CCE in schools under different management types, the study was conducted in two phases. In the first phase sixteen schools were studied using a questionnaire. The schools included five Government SV’s, five KV’s, five Private aided schools and one Progressive school. In the second phase, four schools, one from each management types was selected for a collective case study. The major findings of the study revealed several assumptions that inform the formulation of the scheme of CCE pertaining to schools and students across India being homogenous, schools across India expected to make provisions required for CCE despite huge differences in the infrastructure and support facilities between different types of schools, and in addition, of creating an image of an ‘ideal’ learner. The parameters of assessment suggested in the CCE are more likely to favor a child coming from privileged sections of society. The collective case study indicated that despite claims of a major shift in assessment practices, teachers and schools as a whole showed a lot of residue of an entrenched examination culture. The scheme of CCE has considerably reduced the autonomy of teachers, as they are expected to follow assessment parameters that are ‘prescribed’, leaving them no choice to make their own reflective decisions. The supremacy of
scholastic subjects and an undue focus on overt behavior continues to be maintained as central aspect of student performance.

Yazdani, G. M., & Ali, S. (2014) studied the interest of students and teachers in participation and organization respectively of co-curricular activities in Government schools at elementary level in Delhi. The researcher took 200 students and 10 teachers of five Government schools of South Delhi, as sample. Self-developed questionnaires were the tools for the study. The study inferred that the infrastructural facilities for co-curricular activities in government schools were not available as per requirement, and most of the students and teachers were interested in participation and organization, respectively, of co-curricular activities.

2.2.5 CCE at Secondary Level

Kahn, E. (2001) conducted research aimed at examining teacher-created assessment materials to determine what conceptions or models of teaching and learning were reflected. Kahn found his subjects’, 10th grade English teachers, assessment materials to be an “eclectic mixture of approaches.” Further analysis of the data and teacher comments revealed that some materials adopted a constructivist methodology, required students to construct and interpret meaning, while other assessment modalities represented a more traditional process of recalling information. Kahn concluded that teachers’ assessment practices were influenced by individual beliefs or conceptions related to what constitutes learning and concerns about “maintaining student attention, cooperation, and classroom control.”
Thangamani, C. C. (2002) reported that teachers showed positive attitude towards oral examination as a diagnostic device, this also comes under the purview of present CCE but it was not launched at that time. The effectiveness of CCE implementation depends on teachers’ positive attitude and as continuous and comprehensive evaluation is the new initiative in education, substantial majority of the teachers seemed to think that it promoted creativity, analytical ability, regularity and command over the subjects by students, teachers responded positively to the continuous evaluation system. The different sub-groups of teachers classified on the basis of sex, grade, experience, and subject handled by the teachers did not differ significantly in their attitude towards oral exams as a diagnostic evaluation device for the component provision of remedial measures.

Noonan, B., & Duncan, C. R. (2005) inferred that formative assessment is recognized as an important component of teachers’ classroom assessment strategies; and recent research has pointed to peer and self-assessment as a way to operationalize the principles of formative assessment. The purpose of this study was to investigate the nature and frequency of high school teachers’ use of peer and self-assessment. The results indicated that many teachers find peer and self-assessment useful and that there is potential for greater classroom applicability but that more research is needed to guide wide spread use of these assessment strategies.

Jaiswal (2009) studied teachers’ attitude towards new evaluation system and found that there was a significant difference between para teachers and regular teachers; and male and female teachers regarding their attitude towards this system.

Lourie, O-I., & Schmidt, S. D. (2009) explored the factors which underlie the perceptions and usage of alternative assessment procedures among EFL teachers in Israel.
The sample included 113 EFL teachers who responded to a self-report questionnaire. Results showed that the predominant factor related to the usage of alternative assessment is the technological one, followed by the cultural and postmodern perspectives. The political perspective yielded mixed results. The findings highlighted the complexity of teachers’ assessment practices reflecting not merely a testing approach but a social and educational paradigm encompassing micro constraints (technological), macro influences (political), ideologies and commonly-held beliefs (cultural) as well as evidence of critical pedagogy (postmodern).

Yadav, S. K. (2009) carried out a study with respect to the weightage given to different areas of school curriculum at secondary stage. It focused on 1) To study status of different areas of school curriculum at secondary stage in the country; 2) To ascertain the weightage given to different subject areas in terms of time allocation and marks allotment in annual examination; 3) To derive implication for action to improve the quality of school education at secondary stage. The sample consisted of all 55 states/union territories. The data was collected through a questionnaire on information about the weightage given to different areas of school curriculum. Descriptive percentage statistical technique was used for the study. The findings concluded that a) Structure at secondary stage was not common; b) Curriculum and syllabus of NCERT wasn’t followed throughout the country; c) Number of working days, hours and number of periods were different; d) Nomenclature of subject was different; e) Moral and value education was taught separately; f) Time of annual examination was also different; g) Marks were awarded for scholastic aspect while grading for co-scholastic aspects and lastly, h) Continuous and comprehensive evaluation was followed only in 7 states/union territories.
territories. The implication of the study suggested that steps need to be followed to bring common structure of education for first 10 years of schooling. Efforts should be made for the introduction of grading system in evaluation by way of organizing meeting with policy planners and orienting teachers and teacher education institutions. Also research study should be conducted to know the status of co-scholastic areas in actual practice.

*Kapambwe (2010)* conducted a study on the implementation of school based continuous assessment in Zambia and found that assessment for learning focuses upon the improvement of pupils rather than achievement. It implies that the assessment is developmental as it seeks to diagnose the weaknesses and determine approaches that help to redress them.

*Yin’s (2010)* recommended a more comprehensive understanding of teachers’ underlying thinking processes, which Yin referred to as “assessment cognitions.” It was found that teachers’ strategic cognitions (e.g. teachers’ beliefs in language learning and their understanding of learning goals) and interactive cognitions(e.g., teachers’ preconceived ideas regarding students and their prediction of the students’ performance in the target language use domain) influenced both their approach to planning assessment procedures and the actual implementation of assessment practices.

*Jerry, C., Samuel, M., & Jan, M. M. (2011)* analyzed that writing is a productive skill that is highly prioritized in ESL classrooms. Teachers are expected not only to teach the skill well but at the same time should possess essential competence in assessing it. This case study investigated the ESL teachers’ practices in assessing students’ written work. Interviews were conducted to gather their views. The findings revealed that expert teachers engaged in multiple reviewing activities focus more on meaning-related concern
of an essay. Novice teachers, however, emphasized students’ language errors. These findings provided insights on the need to assist novice teachers in improving their assessment practices.

*Kasture, P. B & Joshi, P. N. (2011)* studied about the concept and need of new innovative evaluation procedure called as continuous comprehensive evaluation which also focused towards need assessment of continuous comprehensive evaluation in the field of teacher education. The study also informed about opinions of teacher educators and student teachers regarding continuous and comprehensive evaluation. For this purpose the researcher conducted survey in teacher education institute. The summary of the opinions showed that student teachers were willing to accept CCE, but they identified various obstacles in the implementation of the same pertaining to physical, pedagogical, administrative etc. and considered the study to be of immense utility to teachers, student teachers and educationists.

*Lovorn, M. G., & Rezaei, A. R. (2011)* found out that the use of rubrics may not improve the reliability of assessment if raters are not well trained on how to design and employ them effectively. The objective of this two-phase study was to test if training pre-service and new in-service teachers in the construction, use, and evaluation of rubrics would improve the reliability of their evaluation of writing assignments. Results of phase one showed that raters were significantly influenced by mechanical characteristics of students’ writing, and that using rubrics may not improve the reliability of assessment attributes if raters are not well trained on how to design and employ them effectively. Researches asserted that without high quality, intense training, participants who used rubrics to assess students’ writing were usually just as subjective in their evaluative
marks as those who did not use rubrics. In phase 2, participants received intense rubrics training prior to being presented with the two writing samples. Results of phase 2 showed that rubrics training led to more reliable assessment of both writing samples.

*Adediwura, A. A. (2012)* carried out a study on teachers’ perception of SBA in Nigerian Secondary Schools. The study investigated the perceived effect of SBA on Nigerian secondary school teachers, with the specific aim of determining the preparedness of the teachers to conduct SBA as well as the perceived effect of the SBA on their teaching practices and students’ learning. The population for the study consisted of secondary school teachers in the six South-Western State of Nigeria. From each of the six states, six secondary schools were purposively selected based on ownership of the schools. A total number of 36 secondary schools were involved in the study. From each of the schools 15 teachers were randomly selected to take part in the study. Thus, the study sample size was 540 teachers. An adapted questionnaire named ‘Nigerian Teachers’ perception of school-based assessment questionnaire was used to collect the data. The result indicated that more than half of the sampled teachers were not adequately prepared to conduct SBA. However, teachers from federal government colleges were better prepared. It was also discovered that more than fifty percent of the teachers had a negative perception of the effect of SBA on their teaching practices and on students’ learning. The study therefore suggested effective monitoring of educational policy implementation and timely in-service training for all teachers irrespective of school owner.

*Chandel, N. P. S., & Ahooja, S. (2012)* investigated about the evaluation system conducted in Dayalbagh Educational Institute (DEI) which is very comprehensive as it covered the entire curriculum such as academic subjects, co-curricular activities, social
service, games etc. Coverage of content in test was quite good as there were many components of testing in which the entire course was covered. Different courses were assigned different credits. There was proper blending of evaluation which was of 75% and external evaluation which was of 25% in DEI. Evaluated answer sheets of students were shown to them within 10 days of the date of examination. This provided the feedback to students to improve their achievement. These features of evaluation system made it unique in itself which covered most of the characteristics of a good evaluation system.

Churasia, P. K. (2012) conducted rubrics based continuous and comprehensive evaluation in Mathematics at the secondary stage. Based on secondary stage Mathematics syllabus and its learning objectives, several mathematical tasks were identified. Selected seven themes were Geometry, Number system, Trigonometry, Mensuration, Algebra, Statistics and Coordinate Geometry. The findings revealed using rubrics during evaluation was sort of diagnostic purposes. It enabled in finding out the learning difficulties of a child in a particular dimension with reference to conceptual understanding, process of learning, language deficiency, etc. The learning problems in mathematics may be in any of the dimensions given above for example, understanding in computing and recognition of symbols where the children generally committed mistake. The teacher was supposed to find out the specific difficulty of the child in learning a concept or a particular step in solving a problem. Therefore, if diagnosis of hard spots of learning is properly done and suitable remedial measures are taken, the learning attainment as well as learning pace of the weak and low achievers will certainly improve.
Therefore, using rubrics may be very suitable and sustainable tools for comprehensive and continuous evaluation.

Chhetri, P. B. (2012) carried out a study on the attitude of social science teachers’ towards continuous and comprehensive evaluation at secondary level in relation to their gender, area and teaching experience. An attitude scale towards CCE was developed by the investigator, having forty items was administered to the respondents to determine the subjects’ attitude towards CCE. All the social science teachers, teaching at secondary level in west district of Sikkim constituted the population of the study. Fifty social science teachers comprising male and female, rural and urban and less than and above eight years of experience were selected as a sample of the study. Two to four social science teachers were selected at random from the sampled institutions. Mean, standard deviation, t-test, quartile deviation were applied to measure and the attitude of social science teachers was compared towards CCE. The analysis of the data revealed that the majority of the social science teachers possessed positive attitude towards CCE. It was found that there was no significant difference in attitude towards CCE between the female and male social science teachers. Teachers working in rural secondary schools were found having same attitude towards CCE as compared to the teachers working in urban schools. It uncovered the fact that the teachers having less than eight years of experience were equally committed and possessed positive attitude towards CCE as compared to the teachers having more than eight years of experience.

Chopra, V., & Chabra, S. (2012) held the view that holistic education implies development of all aspects of individual’s personality including cognitive, affective and psychomotor domains. Further, in recent years, there has been a growing concern for
improving the quality of achievement of all learners at elementary and secondary level. All these efforts were culminated in the form of adoption of CCE by the CBSE since past few years. The researchers thought it essential at this juncture to ascertain the awareness and interest among the teachers for CCE through a sample of 107 teachers through two self made tools. With respect to awareness, large majority of teachers’ possessed knowledge regarding various components of CCE; but with respect to interest, large majority of teachers’ indicated their dislikes as compared to likes in relation to various components of CCE.

Dubey, R., & Upadhyaya, P. (2012) explored the teachers’ attitude towards continuous and comprehensive evaluation. The sample for the study comprised of 79 teachers from four CBSE board schools of Allahabad city. A self-prepared attitude scale was used to measure the attitude of teachers towards continuous and comprehensive evaluation. Data analysis was done using chi-square. The findings of the study indicated that maximum teachers agreed with the fact that CCE helped in regular assessment, it aimed to diagnose the strength of students, it helped to measure the aptitude of students, CCE developed cognitive skills, it developed affective skills, it developed psychomotor skills, CCE reduced rote memory, teachers needed training for CCE, large class size was a hurdle in the successful implementation of CCE, it helped in the all-round development of the students, CCE was time consuming, it was expensive, it increased the responsibility of teachers. While teachers disagreed with the fact that through CCE good study habits cannot be developed, with the help of CCE remedial teaching was provided to students, and CCE was a burden for students.
Frey, B. B. (2012) reported that the commonly advocated best practice for classroom assessment was to make the assessment authentic. Authentic is often used as meaning the mirroring of real-world tasks or expectations. This study presented a conceptual analysis of authentic as it is used in educational research and training to describe an approach to classroom assessment. Nine distinct components or dimensions of authenticity were identified and grouped under three categories like the context of the assessment, the role of the student, scoring and concluded that only one of those is the realistic nature of the assessment. He concluded that the commonly advocated best practice for classroom assessment was to make the assessment authentic as teachers should try to assign tasks to students with which students can form association.

Islam, N., & Chakraborty, A. (2012) attempted to assess the awareness level of in-service school teachers on CCE in Murshidabad district, West Bengal, India. The objectives of the present study were 1. To study the awareness of in-service school teachers towards CCE with respect to their gender; 2. To study the awareness of in-service school teachers towards CCE with respect to their demography; 3. To study the awareness of in-service school teachers towards CCE with respect to their length of service period. They selected 265 samples from Murshidabad district of West Bengal. In selecting the respondents, they chose in-service student-teachers from 08 (eight) different teacher training institutions of Murshidabad district, through simple random sampling technique. The responses from the questionnaires were analyzed. T-test was used to find out the differences in awareness of student-teachers towards CCE with respect to their gender, demographic background and teaching experience. Findings revealed that 1. Significant difference in awareness of student teachers towards CCE with respect to their
gender was found; 't' value indicated a significant difference among them; 2. No significant difference was found in awareness of student teachers towards CCE with respect to their demographic location; 3. Again no significant difference was observed in awareness of the student teachers towards CCE with respect to their teaching experience.

Iyer, H., & Yagnik, B. (2012) explored the critical perspective of CCE as a philosophy of education. They were of the view that CCE has to be seen as a whole new paradigm, only that will ensure that the purpose of teaching and learning as envisaged in the NCF 2005 be achieved. They were of the view that belief system of teachers has a tremendous influence on the changes to be brought in the classrooms, and how change in practices reflects change in the belief structure. Hence CCE has to be seen by the teachers' as a philosophy so that changes can be brought about to the belief systems of the teachers' and this can then reflect in their practices. They accepted that CCE has the potential to bring about the changes in the school system to ensure that the learners will pass-out of the system with the capability to be successful in the changed world. But if the CCE has to deliver to the potential that it has then it has to be seen as something more than the following formula: 10% FA1 + 10% FA2 + 10% FA3 + 10% FA4 + 30% SA1 + 30% SA2 = 100%. Thus continuous and comprehensive evaluation should be seen by standing on the building blocks of personalized learning, continuous learning, building of co-scholastic skills, creating an environment of formative assessment that motivates learners for learning and creates self-regulated learners by emphasizing on design and practice on the part of the teachers.

Kaur, J., & Gupta, D. (2012) conducted a study to analyze the problems faced by the school teachers’ while implementing CCE. The main objective of the study were: a)To
identify the difficulties which teachers faced while assessment of different co-scholastic achievements of students which were mentioned in the scheme of CCE; b) To identify the difficulties which teachers faced while maintaining the records (manual and online) of all the scholastic and co-scholastic achievements of students for CCE; c) To study whether CCE scheme had lead to favoritism and impartiality from teacher’s end; d) To study the problems which were experienced by teachers while implementing the scheme of CCE. The sample of the study comprised of 30 teachers teaching classes 6th -10th in various public and government school in Delhi. A self-made open ended questionnaire was administered on them in which respondents were supposed to give their opinion about the problems faced during the implementation of CCE. The data was then analyzed both quantitatively and qualitatively. The findings revealed that majority of teachers were of the view that large classrooms, difficulty in maintaining records for co-scholastic area, excessive biasness and favorability on part of teachers’, and last but not the least, lack of seriousness on part of the students as the major problems in implementing CCE by the teachers.

Mehta, N. (2012) carried out a study to know the overall opinion of the stakeholders in the school education system. Student’s, teacher’s and parent’s opinions and awareness was checked in a pre-survey and after completion of one year of its (CCE) implementation, a post survey was conducted to know the difficulties faced and to suggest the remedial measures related to it, which will help in implementing CCE more effectively. All the stakeholders had moderate attitude towards CCE. On interaction with the teachers, it was found that they faced hurdles with respect to large size classrooms,
lack of training on part of teachers, lack of time in conducting activities, and difficulty in grading co-scholastic domain etc.

*Mohanty, G., & Panda, S. C. (2012)* conducted a study in relation to teachers’ awareness about implementation of continuous and comprehensive evaluation in schools. They expressed that evaluation procedure plays important role in teaching-learning process. The long awaited CCE system was introduced in the schools by Central Board of Secondary Education across the country with the aim of developing the holistic profile of the learner, by improving the teaching learning process. As teachers play important role in implementation of the scheme they were expected to be well acquainted, conversant and trained/oriented with all the attributes of the system. This study was conducted on forty sample teachers of secondary schools affiliated to the CBSE, and revealed that the level of awareness among majority sample teachers was somewhat moderate and there was much scope for improvement through training and orientation program.

*Raju, M., & Singh, S. (2012)* explored the perceptions of the primary stakeholders in the second year of implementation of CCE for the purpose of understanding the outcomes of implementation. A sample of 99 teachers and 257 students of class X were the participants. Issues such as ‘Awareness and the understanding of CCE’, acceptance of CCE, concerns and challenges, preferences etc. were studied using questionnaires separately for teachers and students. Some of the major findings were, only 39% of teachers felt CCE system of evaluation was better than board examination, more than 56% teachers noticed attitudinal changes among students but towards unacceptable direction, 55% teachers reported difficulty in carrying on the CCE. Only 38% teachers preferred CCE compared to 56% preferring board examinations and about 49% felt that
CCE was a useful system whereas 41% teachers felt it was a formality. Contrasting perceptions were observed between ‘senior –teachers ‘and not-so- senior’ teachers. Among the class X students’ sample, only 39% seemed to have knowledge about CCE, and 32% knew only to some extent. However 68% of them preferred CCE to board exam, compared to 31% who preferred board exam. The other perceptions of students that emerged from the study were: it did not encourage serious study (64%), overburdened the students (63%), encouraged partiality among teachers (56%), and increased the interest in some subjects (62%).

**Sarita (2012)** focused upon the need for further effective teacher professional development in CCE, and included Local, National, and Global curriculum content. CCE policy makers will need to keep a focus on pre-service teacher education, and to the professional development needs of the influx of beginning teachers entering the teaching force in the next few years. There should be space for both integrated, subject based and whole school approaches. Her study showed that teachers’ value the time to plan, the sharing of ideas, and the chance to trial and develop new ideas’ in their schools. They really valued the sharing of experiences with colleagues, the ideas and stimulus of ‘outside experts’ and professional development that is linked closely to their immediate practice.

**Saxena, V. (2012)** explored English teachers’ awareness of the CCE program and their present evaluation practices. For the survey, a questionnaire and a checklist were developed. A sample of total 30 teachers of English was taken from 10 different Government Secondary schools of Lucknow. The findings revealed that the present evaluation practices were not satisfactory and teachers were not properly oriented
towards the CCE program and its main objectives. In English language teaching, continuous assessment of four language skills i.e., listening, speaking, reading and writing including grammar and literary appreciation is necessary. For evaluating all these language skills and areas, formative assessment needed to be done at regular intervals. But the present survey revealed that only the skills of reading and writing were assessed both in continuous and final assessment. Therefore, the study recommended for a proper training schedule, workshop or orientation of the in-service teachers of English regarding the program of continuous and comprehensive evaluation.

**Sharma, I., & Mehta, S. (2012)** revealed that practices of CCE are being done in a well manner only in some CBSE schools. As 70% of the population is in such schools which lacked many facilities required for implementation of CCE, such as conducive environment, proper infrastructure, awareness of teachers and their skills regarding the same. Neither teachers nor students get time for deep study of the content. CCE undoubtedly provided for a good pattern of evaluation but it was totally neglecting the most important part of school life, i.e., learning. It was evaluating the surface learning of students and teachers were not as competent, because of lack of training and awareness, as it required for making the theoretical aspect of CCE a reality.

**Singhal, P. (2012)** explored the perception of Government school teachers’ towards continuous and comprehensive evaluation. This study was an attempt to find out teachers’ perception about the scheme of continuous and comprehensive evaluation, the problems they face while its execution and the suggestions that teachers want to give in making CCE effective and fruitful on ground realities. The sample consisted of 100 Government school teachers from Delhi region. The result of the study revealed that
currently the perception of government school teachers was average which indicates moderate acceptability of CCE by teachers. The teachers were not adequately prepared for the effective execution of CCE in government schools. Further the study revealed that the large number of students in the classes; lack of appropriate training; inadequate infrastructure and teaching materials; and increased volume of work acted as barriers in smooth execution of CCE.

*Sridhar, A. (2012)* considered that even though CCE promises learning sans stress, but has this really been the case with teachers, students? She conducted a survey among teachers and students to find out the charms and challenges of new evaluation. She shared that teachers say that several students did not take the sixty mark theory paper seriously, as they already scored forty through activities. To that, S.S. Rajagopalan, educationist, said that the pass percentage in schools must be increased. “The pass mark is still 35 per cent, so those who score just enough to pass carry 65 per cent ignorance to the next academic year, and this continues year after year,” he said. In the erstwhile Soviet Union, the pass percentage was 80 per cent, and instead of testing children on what they don’t know, they should be tested on what is known to them rather than unknown, and pass percentage must be increased,” We must move towards that,” he said. G. Balasubramanian, former director, academics, CBSE, said that though conceptually CCE is the best instrument for experiential learning, activities must be cost-effective and situational, and must help the student understand the concept. He also shared that “the challenge is the transformation in pedagogy and change in the mindset of teachers. The focus should not be on assimilation of knowledge, instead the child must be able to apply the concept in a real time experience. It makes a shift from conditioned learning to free
learning and it is a paradigm shift and the way forward. Here the teacher becomes a co-learner.”

Bag, S. K. (2013) examined the distance in the philosophy, practice and problems of implementing the continuous comprehensive evaluation or CCE. The major findings were that the philosophy of CCE is not limited to the assessment of student’s scholastic achievement rather it is emphasizing the continuous growth of students, ensuring their intellectual, emotional, physical, cultural and social development. It should be viewed as a means of motivation and to be treated as a tool of feedback. He shared that teachers expressed that as a result of CCE the focus got shifted from teaching to maintaining assessment records, where they need to sketch diagram and chart to ensure the ‘evidence of progresses’. He brought to the notice that there was no relation between the classroom transition (pedagogy) and assessment practices. This ultimately resulted in the low learning levels and loss of resources. To address the challenge, some solutions were suggested like – focus from competency to concept, introduction of grading system, due emphasis on co-scholastic achievement, linkage with placement-formative and summative evaluation.

Bindu, T. V. (2013) attempted developing competencies in preparing rubrics for continuous and comprehensive evaluation among pre-service and in-service physical science teachers. The present paper was an attempt to make student teachers competent to prepare rubrics for evaluation of selected topics in physics and chemistry. Sample assignments, projects, seminar reports based on selected topics were given to secondary school students of variable quality. The answer scripts were analyzed and criteria was listed to be used in the scoring rubric and allowed for discussion of what counts as quality
work. During the creation of the list, teachers were allowed to assess the students’ overall experiences giving due representation to all the three domains. Revision of the rubrics was done on the basis of the feedback. These rubrics could be made use in the teacher training programs and there by equip the in-service teachers to prepare and use the rubrics in their classroom situations.

Choudhary, K. (2013) critically analyzed continuous and comprehensive evaluation process by focusing on education of children with special needs. She unfolded teaching-learning and assessment process as envisioned for children with special need in Right to Education act as well in National curriculum framework-2005. She shared that according to the Census 2001, there are 2.19 crore people with disabilities in India, which constitute 2.13% of the total population. She analyzed CCE critically keeping in mind the needs and challenges of children with special need. She also intended to see how assessment will contribute to learning process of children with special need. She also presented some suggestions for the assessment of education of children with special need in inclusive education system.

Jacob, T. P. (2013) carried out a study on continuous and comprehensive evaluation: Teachers’ appraisal of the concept and the practice which included sample of one hundred KV teachers teaching in different circles of Gujarat, Kerala and Jharkhand. The study attempted to ascertain how teachers perceive the utility as well as the challenges in carrying out the CCE in actual field. It was found out that majority of the teachers interviewed were of the opinion that PTR should be less in each class for true evaluation. Also it was found out that teachers needed more doubt-clearing sessions on various aspects regarding the practicability of the approach. Teachers must be well-trained for
executing this scheme with full faith in the system. He concluded that this continuous and comprehensive evaluation, being inclusive and flexible in nature facilitates in maintaining a holistic approach in school education and needed relevant empowerment of teachers to carry out this vital component for effective learning.

*Kannoth, V. (2013)* elaborated about the perception of teachers with reference to different aspects of CCE and strategies they practiced in the classroom for assessing students in this school. The data was collected from the teachers using a self-made questionnaire, which consisted of 35 items regarding the different aspects of CCE. Discussions with teachers were also conducted to know about the different strategies they followed in the classroom. This data was also crosschecked with the help of classroom observations and feedback collected from students. The study showed that majority teachers had positive awareness about CCE and more than 70% said that they received orientation program related with CCE. Unfortunately 60% of the teachers who received orientation claimed that the program did not have any clarity. More than 90 % were not satisfied with the orientation program. Discussion with teachers and feedback received from the students’ showed that, teachers predominantly used assignments and class test for assessing students through formative assessment. They occasionally (once in a term) used project/lab activity also for this purpose. The discussion also revealed that school conducts at least 4 unit tests (paper- pencil test) before one FA for each subject. It showed that students had to face 16 unit tests, 4 FAs and 2 SAs in a year. The results of the study revealed the dismal condition of evaluation procedure followed as a part of CCE. The burden of students due to more number of tests and other works should be reduced. Similarly burden of teachers due to recording and maintenance should also be
reduced. The whole system needs change and clear directions and guidelines should be given to the teachers regarding CCE.

Kapoor, R. R. (2013) attempted to understand what were the emerging issues while implementation of C.C.E. on the part of teachers? What kind of difficulties teachers faced while implementing C.C.E. in classrooms? What type of problems students face when they were engaged in submitting assignments/projects? How did they perceive this system? What were their views about grading system? How parents viewed CCE as a means of assessing the performance of their children? How teacher educators perceived CCE as a way of assessing students’ performance? How did they prepare student-teachers in this regard? The study was conducted by researcher on 30 secondary teachers, 30 students, 30 parents and 30 teacher educators. The study highlighted the various issues and challenges in implementation of CCE as perceived by various stakeholders in relation to class size, syllabus, overburdened teachers, lack of resources, lack of orientation and other administrative constraints. The study suggested some practical educational implications for school education and teacher education in relation to the constraints.

Kothari, R. G., Shelat, P. H., & Patel, J. B. (2013) focused on implementation of CCE in Secondary schools of Vadodara city with respect to (a) nature of formative evaluation; (b) nature of summative evaluation; (c) frequency and types of formative evaluation; and (d) types of evaluation for non-scholastic aspects. The study also focused on finding out problems encountered by teachers and principals in implementation of CCE and reactions of student’s parents towards CCE. The study was delimited to grant in aid Gujarati medium Secondary school of Vadodara city only. It was a survey type of research with
86 teachers, 10 school principals and 36 parents as sample with random sampling method. Three questionnaires were prepared and administered. Data was collected in two phases, in the first phase, investigators took permission and collected the data from parents and in second phase, data was collected from teachers and principals. Data was analyzed with the help of frequencies, percentages and content analysis techniques. The major findings revealed that more number of students in class, more workload, lengthy syllabus and less time for carrying out evaluation were the major hindrance in implementation of continuous comprehensive evaluation.

Kumar, V., & Sinha, S. (2013) investigated enhancing professional competencies of teachers for educational assessment. He identified the scope of a teacher's professional role and responsibilities for student assessment at five stages namely a) Assessment competencies prior to instruction b) Assessment competencies during instruction c) Assessment competencies after appropriate instructional treatment d) Assessment competencies for teacher involvement in school's policy decisions e) Assessment competencies associated with a teacher in wider community of educators. He concluded that pre service and in-service teacher training programs are needed to apprise teachers of criteria to assess students learning outcomes.

Nagaraju, K. L. (2013) studied the successes and setbacks seen by the teachers of KV’s in the past years and ways to strengthen it. A survey was conducted with the teachers practicing CCE regarding their degree of agreement with the proposed tenets of CCE and misgivings prevalent regarding CCE. The results revealed that both the teachers and students have liked the variety of formative assessment tools which have provided novelty and flexibility to the teaching learning process. In KV’s, the tools have been
looked as more of a teaching tool rather than an assessment tool alone. However, measuring the co-scholastic assessments has proved to be a tough task for the teachers.

_Nawani, D. (2013)_ expressed continuous and comprehensive evaluation as a key educational reform in assessment proposed by the CBSE for primary and upper primary classes in affiliated schools. She made an attempt to analyze the teachers’ manual for class sixth to eighth. Though the premise of such an evaluation framework is sound but the manual actually goes against its very spirit. CCE is not so much about assessment per se as it is about understanding the ways in which children learn, reflecting on the teaching-learning processes employed in schools and empowering both students and teachers in processes related to schooling. She shared that Indian schools need reasonable teacher-student ratios and change in the nature of teacher-student relationship, from an unequal, hierarchical relationship to that of co-participants in a joint process of knowledge construction. So also the creation of adequate resources and opportunities in schools for the development of the multiple facets of students’ personalities, involving students and parents both in understanding the aims of assessments and ways of achieving it. Most importantly, the key is not simply training teachers to implement the framework, but empowering them in all aspects related to teaching, learning and assessing and having a realistic understanding of the conditions under which they work.

_Padmanabhan, J. (2013)_ shared that when many schools claimed to have shifted to constructivist classrooms, they have failed drastically in pursuing a constructivist mode of assessment. He observed that in the present schools, teachers and students are overburdened with execution of projects, assignments, seminars etc. and giving marks to such activities which they claim as formative assessment. Keeping in mind the
observation, he posed some questions like; Is this what CCE demands? Do we need to have CCA rather than CCE? Do our schools follow the so called CCE in its right sense? Do the practice of so called CCE increase stress and workload among students and teachers? Can the no detention policy really work in this context in terms of quality? He agreed that these are some of the areas that are needed to address while formulating an assessment that suits a constructivist classroom which is supposed to be a major concern in our present assessment practices followed in schools. Hence the study focused on suggesting some ways for addressing the above questions. An attempt has been made in the study to focus on assessment for learning as a way to overcome some of these pitfalls. Assessment for learning which is considered as a formative assessment should look into rectifying errors among learners rather than providing marks and grades. Hence focusing on one’s ability is a concern. The study also focused on how to conduct such assessment in classrooms so that our classroom become teacher-cum-student friendly and learning becomes joyful.

Patil, S., & Biradar, B. S. (2013) studied the opinion of students and teachers, towards implementation of CCE in CBSE School. The aim of this study was to examine the best practices followed by teachers while implementing CCE in CBSE schools of Belgaum district and the opinion of students towards implementation of CCE in CBSE School. The sample comprised 125 teachers teaching in CBSE Schools and 146 students studying in CBSE school. A questionnaire was prepared by investigator to collect the data from the teachers. The survey showed many teachers followed learner centric practices while implementing CCE in CBSE Schools of Belgaum district. The students had favourable opinion towards implementation of CCE in CBSE Schools of Belgaum district.
**Rao, P., & Kumar, N. R. (2013)** shared their experiences, observations and learning, specific instances/snippets and episodes of implementing CCE in Government schools. They explored the following issues like the perspective of teachers regarding CCE, the lack of understanding between the intent and action of CCE, specific instances of how the problems were perceived and realized by teachers in the context of CCE implementation, the teacher-student ratio and CCE implementation, teachers availability and capacity in assessing the children with respect to co-scholastic achievements, and support received from HM for CCE implementation. Results revealed that there was a need to view CCE from the broader perspective of - learning of the child and in the spirit of RTE. There was also a need to enhance the professional practices of teachers and including teacher voice in the professional discourse related to in-service teacher training.

**Singh, A., & Patel, J., & Desai, R. (2013)** explored the attitude of student teachers towards continuous comprehensive evaluation with reference to gender, caste and habitat. Students of the Bachelor of Education (B.Ed.) program of Maharaja Sayajirao University of Baroda were party to this system and in future as teachers may be involved in the system. The study tried to address the questions pertaining to how do they perceive the system? What are their attitudes towards the system? Are the questions that would decide the future course of the system? How do students perceive the evaluation system of Department of Education, Maharaja Sayajirao University (MSU)? What are the issues and liking of the student towards the evaluation system of Department of Education, MSU? The major findings that emerged from the present study were: 1) Attitude of B.Ed. students towards continuous internal assessment was found to be moderately favorable; 2) 38.86% of the students had highly favorable attitude, 60.43% of the students had
moderately favorable, and 0.71% had least favorable towards the existing continuous internal assessment system; 3) The mean attitude towards continuous internal assessment of male and female students was 139.97 and 144.11 respectively. The t-value was 1.49, which was not significant at 0.05 level. Hence, it was concluded that there was no significant difference in the mean attitude towards continuous internal assessment of male and female B.Ed. students; 4) The mean attitude towards continuous internal assessment of students belonging to rural and urban habitat was 142.80 and 142.98 respectively. The t-value was 0.056 which was not significant at 0.05 level. Hence it was concluded that there is no significant difference in the mean attitude towards continuous internal assessment of students belonging to different habitat; 5) The mean attitude towards continuous internal assessment of students belonging from different castes viz. General, OBC, SC and ST was found to be 142.63, 142.80, 151.33, 140.41, 144.64 and 142.95 respectively. The F-value was 0.658, which was not significant at 0.05 level. Hence it was concluded that there was no significant difference in the mean attitude toward continuous internal assessment of students belonging to different caste categories. 

_Bansal, G. (2013)_ explored the challenges faced by teachers in the implementation of CCE. This study reported the findings obtained from a qualitative study conducted in three CBSE affiliated schools. Tools included were semi-structured interviews with teachers, focused group discussions, and classroom observations etc. The problems identified were, deficient assessment literacy; preoccupation with managerial roles; over-emphasis on evidence collection; completion of records was leading to loss of learning time, eventually, decaying the quality of teaching-learning process; teachers’ perception about curriculum, subject matter, teaching, and learning has been shown to
influence classroom practices; which in turn have consequences for student outcomes, and teachers holding on the nativist view of pupil intelligence, considering science as a bundle of facts and considering assessment only for external reporting posed resistance to the assessment reform. Apart from these, various functional impediments, such as, paucity of resources, stressing the quantity of assessment, dealing with large number of class sizes, inhibiting role of school administration etc. posed challenges under which even the most change committed teachers felt exasperated. She suggested that there was an urgent need of teacher professional development, may it be, knowledge and skills in development of assessment tools; their proper execution; different ways of record keeping; making meaningful inferences from the information collected; and providing stakeholders with constructive feedback. Further, change needs to be instituted not only in in-service but pre-service teacher education programs as well. One way to empower teachers was to engage them in action researches so that they can ‘feel’ the benefits of CCE themselves. In addition, it should be coupled with facilitative role of administration and co-operation from other competing stakeholders, in particular, parents.

Shandilya, S. (2013) explored the perception of Secondary school teachers about feasibility and relevance of CCE in school. A total of 300 (n = 189 female teachers; n = 111 male teachers) Secondary school teachers from thirty CBSE board schools of Varanasi city filled a self-reported questionnaire that contained questions related to feasibility and relevancy of CCE on four dimensions i.e. evaluation of life skill, evaluation of attitude and values, evaluation of co-curricular activities and lastly evaluation of physical and health education. Analysis was done on the basis of gender; designation and teaching experience of teachers using descriptive inferential
statistics. Only 9% teachers of secondary stage were found to have high level of favourable attitude towards implementing CCE in schools. On overall score, gender and designation of teachers were found to have no significant effect on perception of teachers towards CCE, but teaching experience was found to have a significant effect on perception towards implementing CCE. In four dimensions of CCE, only life skill was the component for which 32% teachers had high level of favorable attitude. Rest dimensions i.e. attitude and values, co-curricular activities and physical and health education were the component for which only 5%, 5% and 9% teachers had high level of favorable attitude. Study concluded that teachers had an average level of favorable attitude towards implementing CCE in schools. Teaching experience had an effect on perception but gender and designation did not play important role in this.

Sharma, K. (2013) investigated the attitude of teachers towards continuous and comprehensive evaluation. For this purpose the sample of 100 teachers were purposively selected. After establishing proper rapport the attitude scale was administered to the subjects. The data was scored according to the scoring procedure given in the manual. To study the significance of difference between the various groups t test was applied. The overall results indicated that the there was a significant difference between the attitude of school teachers towards continuous comprehensive evaluation in relation to locality experience and nature of school.

Singh, V. (2013) attempted to find out the suitability of CCE in current Indian situation and tried to know the attitude of stakeholders of education regarding current assessment system. For the study, researcher purposively chose hundred samples, of which forty were student, twenty teachers, and twenty educational experts (Researcher and teacher
The researcher made use of a semi-structured interview schedule and created an environment of group discussion to investigate the relevance of CCE in current education system. The results revealed moderate attitude possessed by the teachers regarding the current assessment system. The teachers also shared numerous problems faced by them in implementing CCE in relation to lack of time for conducting activities in class; large number of students in the class; lack of training on the part of teachers; infrastructure and administrative constraints etc.

*Varghese, S. (2013)* conducted a study focused on the following objectives: a) To study the attitude of teachers, students and parents of CBSE affiliated schools in Thiruvananthapuram district; b) To study the problems facing by administrators, teachers, students and parents regarding CCE; c) To study the challenges in implementing CCE; and d) To find out the suggestions of the teachers, parents and students to improve the quality of CCE. The study was conducted in selected five schools in Thiruvananthapuram district. The study found that implementation of CCE needs to be improved. The paper focused on various challenges and issues, problems faced by teachers and students and suggested measures for improving implementation of CCE in the context of large size classrooms; orientation and workshops for the teachers; lack of resources; collaboration among teachers; increase in workload on teachers and students; time constraint; and neglect of individual differences in the class etc. The research revealed that understanding of CCE among the stakeholders is very low and different students have different opinions.

*Anitha, T. S. (2014)* explored the opinion of teachers towards continuous and comprehensive evaluation which further analyzed comparing the opinion of male and
female teachers towards continuous comprehensive evaluation, to compare the opinion of Government and Private school teachers towards continuous comprehensive evaluation, and to compare the opinion of urban and rural school teachers towards continuous comprehensive evaluation. Accordingly the hypotheses were formulated. For this purpose the sample of 100 teachers were purposively selected. After establishing proper rapport, the questionnaire was administered to the subjects. The data was scored according to the scoring procedure given in the manual. To study the significance of difference between the various groups, t test was applied. The overall results indicated that there is no significant difference between the opinion of Government male and female school teachers towards continuous comprehensive evaluation; there was significant difference between the opinion of Private male and female school teachers towards continuous comprehensive evaluation; there was no significant difference between the opinion of Government and Private school male teachers towards continuous comprehensive evaluation; there was significant difference between the opinion of Government and Private school female teachers towards continuous comprehensive evaluation; there was significant difference between the opinion of male and female teachers towards continuous comprehensive evaluation and there was significant difference between the opinion of Government(rural) and Private(urban) school teachers towards continuous comprehensive evaluation.

Bhaskar, R. (2014) aimed to bring the voice of teachers to the centre stage regarding continuous and comprehensive evaluation so that it provides an insight into the status of implementation of CCE in the schools. Semi structured interview were carried out with 20 teachers of classes VI to X belonging to both Private and Government schools of
Delhi. Observation of assessment practices were also carried out. The study revealed that teachers considered holistic development of the students as one of the aims of CCE and agreed that it had been introduced to reduce the stress for students, to bring to the surface the latent potential of students as well as to help those who have not been able to do well in the traditional pen and paper examinations. They appreciated the assessment pattern but also expressed that CCE is not suitable for the Indian context. Based on their personal experiences all the teachers happened to mention that in the Indian education system CCE cannot be implemented and the reality is that it is not working in the field. They shared several reasons for the difficulties in implementing CCE which included: student-teacher ratio; syllabus load; lack of time; increased burden on both students and teachers; grades not reducing the importance of marks; fake evaluation; status of first generation learners; and importance given to paper work than what was going on in the class.

Gohain, M. P. (2014a) shared that though CCE had improved scores, but not teaching as in the 5 years of its implementation it definitely raised CBSE’s pass rate to 98.76%, but tests were often ‘too easy’ and some schools ‘inflated’ marks. The analysis of school-level assessment showed that nearly 35% of schools didn’t do their summative assessment evaluation strictly as per the board’s marking schemes while 38.1% didn’t use sufficient tasks and tools in co-scholastic assessment. CBSE’s first report on continuous and comprehensive evaluation (CCE) since its introduction in 2009 showed that the performance of schools has been a mixed bag. Though the student scores and the overall pass percentage had shown improvement but on the flip side, CBSE had found the general classroom teaching methodology wanting. Tasks given to students in 54.6% of the schools were of average quality and the difficulty level was also average or below.
average in 86% of schools. Studies by CBSE, NUEPA, and NCERT showed that 60% of the parents and 90% of the teachers were happy with the new scheme of assessment and the related reforms. With respect to formative assessment, only 10% FA tasks were challenging while 11% were “too easy”; 50% of the projects were of average quality; 27.3% of tasks showed a wide variety; only 10.6% of schools did group projects; 36.2% of schools assigned multi-disciplinary and trans-disciplinary projects; and most common methodology for FA grades was ‘average’ of selected tasks. While in summative assessment, 65.5% of schools stick to marking scheme; 19.6% deviated for some questions and 7.8% strayed from it widely. Subject evaluators rated 50% of schools as average and 41% as good. While the results improved significantly, CBSE was forced to introduce many changes in the scheme, such as mandatory appearance in both the SA’s and also a minimum requirement of 25% cumulative scores to qualify the examination.

Gohain, M. P. (2014b) revealed that while the results in classes X and XII have seen a marked improvement, both in terms of the overall pass percentage and the number of high scorers, the CCE report showed that much effort was needed to integrate the teaching, learning and assessment process. He shared Mr. Vineet Joshi response with respect to challenges in CCE that, “We faced two big challenges when we set out to introduce CCE- the strategy for implementation and taking the school into confidence as well as clearing the doubts in the minds of students, parents and teachers. We successfully overcame those problems. But, even five years down the line, the challenge that remains is the shift in teaching methodologies in classrooms to integrate the teaching, learning and assessment process. That continues to be a focus because the teachers find it difficult to understand how all these can be combined.” He also brought upon the fact that
the chairman felt many schools have successfully adopted the CCE scheme. He also explained how CCE had brought a paradigm shift in teaching. Earlier, teachers would instruct, give exams and allot marks to evaluate students’ progress. He also highlighted that the chairman laid stress on learning through interaction and self-study, with the teacher acting as a mediator.

**Hussain, B., & Masih, A. (2014)** attempted to study the teachers’ awareness about the system of continuous and comprehensive evaluation in schools which included thirty teachers of CBSE affiliated schools of Delhi. A self-constructed questionnaire was used to assess the level of awareness of teachers towards continuous and comprehensive evaluation. The study revealed that the awareness of the teachers about the system of continuous and comprehensive evaluation was somewhat moderate and there is much scope for improvement through training, workshops and orientation program.

**Times news network (2014).** On the occasion of International Education day, during a free-wheeling interaction with HRD minister Smriti Irani, schoolchildren demanded scrapping of CCE system that made class X examination optional. They expressed their desire to revert to the traditional system of class X examination. Students told the minister that though class X examination has been made optional in order to lessen the stress on students, but it is just the opposite happening in class XI when students actually start to feel the burden. Majority of them felt that the new system is designed in such a way that there is a range of 10% in each grade within which bright and average students are put together. Students also pointed out that 40% weightage for projects is not the right way to judge students as most of these projects are a copy and paste jobs. Some of them also expressed that students no longer fear teachers and sanctity of relationship need to be
restored as soon as possible. Students also pointed out that NCERT textbooks need to be updated and modified on a regular basis.

2.2.6 Impact of Continuous and Comprehensive Evaluation

Rao, R. S., & Bharathi, M. (1989) studied evaluation of continuous evaluation system of examination in KV’s. The objectives of the study were: 1) To study the relationship between performance and the level of uncertainty in different subjects and different schools; 2) To find out the effect of continuous evaluation system on the final performance of students; and 3) To study the relationship between parental characteristics and the performance of students in the context of uncertainty. The sample comprised class X students of KV’s from different states. Marks of the students of class IX in five components of the continuous evaluation system in five subjects as per practices in the three sample schools were obtained from school records. Marks of the students in these subjects in the class X Board examination were also obtained. Questionnaires too were administered to parents, students, and teachers. The major findings of the study were: 1) Nominal success of the system was observed in Hindi in both Vishakhapatnam and Delhi schools; 2) Partial success was observed in Science in the Delhi school and also in Social studies in the Vishakhapatnam school; 3) Complete success of the system was observed in English in the Delhi school and in Mathematics in the Vishakhapatnam school. In other words, in Sambalpur, the system was a complete failure as higher levels of father’s education did not necessarily lead to them developing a better perception about the usefulness of the system and of their using the system for the betterment of their children, education of mothers could become a useful input to some extent in making the system
successful, higher levels of parental income to some extent did necessarily lead to their using the system in training their children in a better way, discipline and regularity seemed to be the objective which parents appreciated in the continuous evaluation system. Roughly 25% of the students in two sample schools, disliked the present system of evaluation, teachers responded positively to the continuous evaluation system, and a substantial majority of the teachers seemed to think that it promoted creativity, analytical ability, regularity and command over the subjects by students.

Bachman, L. F., & Palmer, A. (1996) found out that overall, effective assessment could have a positive impact by providing valuable information to educators, parents, administrators, and students and classroom assessment plays a crucial role for young language learners. At the same time, however, it is equally important for teachers to be mindful of the impact their assessment techniques have on young learners.

Steadman, M. (2002) highlighted that classroom assessment over the past several years is confident about one thing: classroom assessment is good for both teachers and students. As a feedback strategy that provides teachers with data on teaching effectiveness and student comprehension, classroom assessment also involves students in active mental processing of new information and makes them more aware of themselves as learners. Suggestions for going beyond the basic use of classroom assessment techniques and a deeper understanding of thinking about learning: Faculty needs more opportunities to come together and talk about teaching. Faculty needs more explicit training on the relationship between classroom assessment techniques and cognitive learning theory. Teachers should consider some key questions about their purposes for using classroom assessment.
Tiwari, A., & Tang, C. (2003) investigated to evaluate the effectiveness of portfolio assessment in enhancing student learning. Students undertaking the bachelor of nursing program in a University in Hong Kong participated in the study. Twelve of the students who underwent portfolio assessment described, in individual semi-structured interviews, their experience and perceptions of this form of assessment. Three themes emerged from the students' accounts: (1) the students favoured the use of portfolio assessment; (2) the process of preparing portfolios yielded positive academic and affective outcomes; and (3) unexpected findings in the form of spontaneous collaborative learning and apparent increased interest in learning during the process of preparing portfolios for those students who lacked motivation. The qualitative findings contributed to a better understanding of the use of portfolio assessment and have implications for teaching.

Seltzer, M., K. Cho., & Thum, Y. M. (2003) findings showed that there is positive change in student’s performance and they progress through new evaluation system. Continuous and comprehensive evaluation is working towards the betterment and refining of each student’s talent academically.

Pani, P. (2004) investigated the impact of continuous and comprehensive evaluation at primary level in the state of Orissa. The objectives of the study were: 1. To study the effect of CCE on achievement of primary school children in scholastic areas, namely, Mathematics, Language and Environmental Study (Science); 2. To study the effect of CCE on achievement of primary school children in co-scholastic areas, namely, regularity, punctuality, discipline and cleanliness; 3. To study the relationship between scholastic and co-scholastic areas of learning on achievement of primary school children. The sample for the experiment comprised of 400 class V students, 200 from
Bhubaneshwar and 200 from Khurda. The subjects after pre-test were exposed to CCE in scholastic as well as co-scholastic areas quite systematically. At the end of the treatment, competency based tests in scholastic areas were administered as a measure of dependent variable. Achievement scores on competency based tests were analyzed with the help of ANCOVA, whereas scores on co-scholastic areas were analyzed using ANOVA. The final scores were further analyzed with the help of the product movement correlation to find out the relationship, if any, between scholastic and co-scholastic abilities. The study revealed the following findings: 1. CCE was found to have significant effect on both the scholastic areas, namely, Mathematics, Language and Environmental Science, and co-scholastic areas, namely, regularity, punctuality, discipline and cleanliness; 2. Language has got significant relationship with regularity, punctuality, discipline and cleanliness; 3. Environmental Study has got significant relationship with regularity, punctuality, discipline and cleanliness.

McKay (2006) concluded that classroom assessment plays an integral role in keeping track of EFL or ESL children’s progress of acquiring language and diagnosing their strengths and weaknesses.

Streb, A. G. (2009) observed the academic achievement of students who are involved in co-curricular activities when statistically compared to the performance of their peers who are not involved in co-curricular activities. The results indicated a positive correlation with improved academic achievement and was interpreted that participation in co-curricular activities had a positive association with student’s academic achievement.

Mohanty, M. (2010) revealed that continuous and comprehensive evaluation has led to more confusion rather than being welcomed by schools. The bafflement it has generated
is ambiguous amongst school managements, teachers, students, parents, publishers and other agencies working in the field of education. Thus, there are schools who consider intensive CCE training as the need of the hour for different stakeholders. Students expressed that it will mean more assessments for them on an ongoing basis. Teachers felt that their work has increased tremendously with assessments having additional ‘descriptive indicators’. The author also talked about how some solutions that have immediately come up in the market like the CCE software would help teachers grade the descriptive indicators. Such solutions further state that there is no need for anecdotal records; software will grade all life skills, attitudes and values. Then, there were publishers who felt that adding more worksheets or assessments in books will make their books CCE-centered. The author expressed that what is visible through all these efforts is the lack of understanding of the framework and ideology behind implementing CCE.

Sibbal, K. (2010) expressed that the terminal examinations at the secondary stage in our country have added to the stress level of the young students. Every year, at the time of the examination and again at the time of declaration of the results, several news reports appear on suicide by students due to anticipated or actual poor performance in the exams. The parents are also under tremendous tension during the exam days and at the time of declaration of the results. To address this longstanding issue, we piloted the examination reforms in CBSE last year. CCE was introduced in classes 9th and 10th. From 2011, the terminal examination at class 10th level will be optional. The mark system has already been replaced by grade system starting from 2009 exam. This has reduced unhealthy comparison with other students. The initial results of the reform appear quite encouraging. The students and parents find CCE less stressful. Grading system has
yielded better overall results, probably because students do better under less stressful situations. Under CCE system, more focus is given to development of the total capability of the students in both academic and non-academic fields.

Jadal, M. M. (2011) studied the effect of continuous and comprehensive evaluation on student’s attainment at primary level. The main objectives of the study were: 1. To develop the skills those are to be fostered among children; 2. To transact the skills through formulated activities and various learning models; 3. To design and construct continuous and comprehensive based test items for assessment of the skills; 4. To study the effectiveness of continuous and comprehensive evaluation techniques as a devise for qualitative improvement of primary education. The study was conducted on VII standard students in English subject. The experiment was conducted in three phases wherein in phase I learner’s achievement was recorded through entry-level behavior. In phase II, activities were planned for teaching through various teaching-learning modes for the transaction of various skills. In phase III, post evaluation program was organized wherein students’ assessment was assessed through oral, objective (written) and performance tests. From the analysis of the results it was found that a) Attainment of the concepts and development of multiple abilities/ mastery of skills can be possible through continuous and comprehensive evaluation at primary level; b) Continuous and comprehensive based performance tests and oral tests provide maximum exposure to the children and motivate the children to be concentrated on the required skills, which help them to reach at the mastery level; c) Continuous and comprehensive evaluation creates interest, attention and learning attitude among the students; d) Continuous and comprehensive evaluation techniques helps in the acquisition of different performances, skills and enhances the
level of listening, reading, speaking, writing and comprehension abilities among the children; e) The findings also indicate the number if non masters decrease and that of masters increases considerably by continuous and comprehensive evaluation.

*Chauhan, A. (2012)* examined the effect of continuous and comprehensive evaluation on students’ attainment in Science at elementary level. The study was conducted on VIII standard students in science subject. From the analysis and interpretation of the result, it was found that the systematic and well planned continuous and comprehensive evaluation has profound implication on the attainment of the learning achievement of the students leading to the all-round development of the personality of the learner.

*Khatoon, R., Sharma, G., & Anand, H. (2012)* presented findings of a research conducted on University students. The sample of the study consisted of thirty students in continuous evaluation system taken from Dayalbagh University (Group I) and thirty students in comprehensive evaluation system taken from Agra University (Group II). Stress was studied by administering perceived stress scale developed by Sheldon Cohen. Results showed that mean scores of stress in group-I was 16.86 and for group –II it was 19.83. Obtained t value was 2.84 which was significant at .01 level. The present study revealed a significant difference in the level of stress between the two groups. Students of group –II was found with high stress in comparison to the students of group I. Findings revealed that stress was found as an important psychological factor which affects the student’s achievement.

*Manani, P. & Sharma, S. (2012)* studied the text anxiety among students studying under continuous examination system and terminal examination system. The sample was selected by using simple random sampling method and the final sample consisted of 160
undergraduate students. Test Anxiety Scale by V.P Sharma (1997) was used to measure the level of test anxiety. Results revealed that obtained t value was 2.09 and it was significant at 0.5 level. It showed that there is a significant difference in the test anxiety level of both the groups. Mean test anxiety score for subjects studying under continuous examination system were found 88.86 while mean test anxiety score for students studying terminal examination system was found 80.56. It showed that students studying under terminal examination system have higher level of test anxiety than the students of continuous examination system.

Angadi, G. R. (2013) studied to find out the impact of continuous and comprehensive evaluation and fixed interval schedule reinforcement on academic achievement of VIII standard students. It was experimental design and completed in two phases with the duration of 60 days, 30 days for each phase. In first phase 30 students were randomly selected from VIII class of Boys Govt. high school Bijapur city. This sample was divided into two equal groups. One served as control group and other as experimental group. A pretest was conducted to both the groups in the subjects of English. Both groups were taught by subject specialist of English. Control group was only taught and was not given any treatment whereas experimental group was taught and evaluated by teacher made test during session. After completion of 30 days teaching, a post test was conducted in English. In the second phase 30 students were randomly selected from IX class of Boys Govt. High School Bijapur city. This sample was divided into two equal groups. One served as control group and other as experimental group. A pretest was conducted to both the groups in the subjects of English. Both groups were taught by subject specialist of English. Control group was only taught and was not given any treatment whereas
experimental group was taught and evaluated by teacher made test and reinforcement was given with a fixed interval schedule, after every six days, during session. After completion of 30 days teaching, a post test was conducted in English. It was found that continuous and comprehensive evaluation and fixed interval schedule reinforcement had significant relationship with learning and academic achievement in the subjects of English at secondary school level. It was recommended that educational institutional management and government may arrange capacity building programs for teachers to familiarize them with evaluation, its importance and its process. Curriculum designers and developers may design and develop continuous and comprehensive evaluation tools within curriculum documents for each subject keeping in view the requirements of fixed interval schedule reinforcement in the manuals for textbook instruction.

Sakesh, G. (2013) highlighted the assessment and evaluation practices in Singapore and shared that Singapore educational system has shifted towards school-based assessment, which has made internal assessments more credible. The findings revealed that each school has evolved a flexible and implementable evaluation system. The reformed educational system consistently produced students’ who perform well in international benchmarking tests, placed Singapore high on the best performing educational systems. The key aspects in the Singapore assessment system were the competencies which were used in conjunction with performance outcomes and students were promoted.

2.3 Summary of Review of Related Literature

The review of the researches in the area of continuous and comprehensive evaluation highlighted the following evidence - 1. Perception, attitude and knowledge of teachers’
regarding CCE; 2. Practices of teachers’ implementing CCE both at primary and secondary level; 3. Problems faced by teacher’ and suggestions for making CCE effective; 4. Impact of CCE

1. The studies both in India as well as abroad focused on the perception, attitude, and knowledge of the teachers’ towards CCE at both primary and secondary level. (Thangamani, 1989; Rao & Rao, 2008; Harrington, 2009; Jaiswal, 2009; Adediwura, 2012; Chhetri, 2012; Chopra & Chabra, 2012; Dubey & Upadhyaya, 2012; Mohanty & Panda, 2012; Mehta, 2012; Panda, 2012; Raju & Singh, 2012; Saxena, 2012; Singhal, 2012; Naidu, 2013; Jacob, 2013; Kannoth, 2013; Patil, & Biradar, 2013; Rao & Kumar, 2013; Shandilya, 2013; Singh, 2013; Varghese, 2013; Mufeed & Ali, 2014; Hussain & Masih, 2014; Yazdani & Ali, 2014) wherein few studies revealed that teachers had moderate awareness towards CCE with most of the teachers finding it difficult to understand the difference between formative and summative assessment, tool and technique, and lack of awareness regarding designing quality rubrics. While few teachers’ demonstrated exceptional awareness in relation to various components of CCE.

Velugu, 2013; Sakesk, 2013; Singh, 2013; Chopra, Dutta, & Bhatnagar, 2014; Mufeed & Ali 2014) found out that practices were not in the manner as desired by CBSE. Still, most of the teachers followed the traditional practices of assessing the learner as compared to using multiple tools of assessment like rating scale, checklists, rubrics etc. Text–book was considered to be a very important resource by most of the teachers and it was found difficult to integrate activities and tasks in the lesson to be taught. It was also highlighted in few studies that implementation needed the desired zeal, enthusiasm, awareness and interest. But few teachers practiced CCE very efficiently keeping in mind the principles for effective implementation. They were found to be using different tools for assessing the language skills of students, making use of assessment criteria and providing qualitative feedback.

3. Another fact that came to light from the review was that it talked about various problems faced by the teachers in the effective implementation of CCE at both primary as well as secondary level. Studies by (Smita, 2002; Rajput et al, 2003; Rea-Dickens’s, 2008; Devi & Swain, 2010; Nabis, 2011; Indrani & Singh, 2012; Kothari & Thomas, 2012; Kaur & Gupta 2012; Bag, 2013; Kannoth, 2013; Nagarajun, 2013; Padmanabhan, 2013; Sridhar, 2012; Bansal, 2013; Varghese, 2013; Bhaskar, 2014; and Srivastava, 2014). Another aspect of the review pointed towards making practical suggestions for the effective implementation of CCE at primary level as well as secondary level. It was felt and shared by the teacher community that the examination reform in the form of CCE was no doubt
introduced with a positive spirit but its true implementation requires changes in the area of administration, pedagogy, and attitude of teachers.

4. With respect to the impact of CCE on student’s performance at the primary and secondary level, most of the studies highlighted the positive impact it had by keeping a track on the performance of the students in relation to promoting creativity, critical thinking, regularity, improvement in the academic achievement and co-scholastic skills in the absence of stressful conditions and leading to the holistic development of the personality like (Rao & Bharti, 1989; Bachman & Palmer, 1996; Steadman, 2002; Seltzer, Cho & Thum, 2003; Pani, 2004; Streb, 2009; Sibbal, 2010; Jadal, 2011; Manani & Sharma, 2012; Sakesk, 2013) while one of the studies in relation to the impact like (Mohanty, 2012; Bag, 2013; Srivatava, 2014) presented a critical perspective of CCE and brought to light that CCE has done more harm than good in the absence of the understanding of the structure, philosophy and ideology behind CCE on the part of various stakeholders of education.

2.4 Overview

The above chapter contains the result of survey and assessment of related literature. While doing so, it was kept in mind that as a vital and fundamental aspect of any research project, past as well as the current literature pertaining to the specific study undertaken by the researcher is critically read and analyzed to avoid the deception of effort and get due benefit from what has been already done.
As CCE (Continuous and Comprehensive Evaluation) was introduced by CBSE (Central Board of Secondary Education) at secondary level in 2009 in class IX and then subsequently in class X, the researcher couldn’t find any direct study pertaining to CCE at secondary level initially. A lot of studies could be found related to need for examination reforms, types of assessment, CCE at primary level, and impact of CCE etc in both India and abroad. Few studies focused on student’s and teacher’s perception towards examination reforms; most studies abroad emphasized on the importance of formative assessment and its implications on various aspects of education; grading system is another area which encouraged research in India as well as abroad discussing its benefits at length; a lot of studies pertained to CCE at primary level have also been undertaken in relation to status of assessment practices followed by teachers in different states, teacher’s thoughts and views regarding CCE, etc; studies related to CCE at secondary level had orientation towards perception and attitude of different school teachers towards CCE in relation to various demographic factors, status of classroom assessment practices and problems encountered by teachers in different states etc. Keeping the above studies in mind and their respective rationale, researcher thought of taking up a study in the state of Delhi pertaining to the Awareness, Interest, and Practices of Teachers’ towards CCE. The three variables in the study needed further exploration as not much was being conducted with respect to teachers teaching at secondary level. In the various studies discussed so far, the variables as undertaken by the researcher together have not been seen in any of the above studies. While finding out the classroom practices undertaken by the teachers of English, the researcher would also study the problems faced by them in the implementation of CCE.
A sincere attempt will be made by the researcher to find out the similarities and dissimilarities in the researches already undertaken and currently being conducted by the researcher. The past literature always helps in finding out the new area of investigation which after data analysis and interpretation would help to draw out important implications for various stakeholders of education and at the same time coming up with suggestions for further research.