CHAPTER 5

MAJOR FINDINGS AND DISCUSSION

5.0 Introduction

Findings and discussion were the important part of any research study since it shows the main outcomes of the study and helps in dispersing the entire crux of the study to the field of education. In this chapter the investigator has made a humble effort to do the same by writing the findings objective wise and also discussing the highlighting points in the findings by interweaving it with the previous researches.

The major findings of the study are mentioned objective wise as follows. The other findings are written in the concluding paragraph at the end of analysis of each objective in chapter 4.

The objective 1 was studied under different aspects, the findings for those aspects were mentioned from 5.1 to 5.7. the findings for objective 2 and objective 3 are written in 5.8 and 5.9.

5.1 Development of cognitive skills, psychomotor and affective skills in the students

5.1.1 Cognitive skills

5.1.1.1 Weightage given to different levels of the questions in FA tests

1) 16.66 percent Science teacher responses , 37.5 percent Mathematics teacher responses, 33.33percent English teacher responses and 31.25 percent Social Science teacher response about the weightage given to different levels of questions was not in consensus with the weightage given to different level of questions in the 15 Science , 11 Mathematics, 6 English and 9 Social Science formative test papers.
2) Total 40 percent Science question papers, 54.54 percent Mathematics formative assessment papers, all 100 percent English question paper, and 33.33 percent

Social Science question papers had HOTs questions in the test papers none of the subject teachers mentioned about it.

5.1.1.2 Opportunities provided for development of cognitive skills and their assessment (Science, Mathematics, English and Social Science)

3) 55.81 percent teacher responses and 17.64 percent student responses confirm that 17.64 percent students could use the opportunity given for conducting an investigate research as an FA activity in Science.

3) 17.64 percent teacher responses and 11.29 percent student responses confirm that 11.29 percent students could use the opportunity given for conducting model making as an FA activity in Science.
4) None of the teacher responses said that they had considered completion of notebooks, class test, worksheets and assignments for formative assessment , but the 22.05percent student responses revealed that worksheets and notebooks were also considered as the formative assessment activities.
5) 75percent of the Science teachers assessed the Science formative activities based on criteria like sincerity, hard work, regularity and punctuality and use of language/ communication related components of assessment for Science activities like presentation, confidence and language proficiency only 25percent Science teachers used cognitive components like innovation , content clarity and originality of ideas.
6) 54.54percent Mathematics classroom observations reveal that extra sums for improving problem solving skills were given to students but students hardly were given time to read, understand and reflect on the problems, the teacher hurriedly read the sum and started explaining the so the opportunity to enhance the cognitive skill was not given in 54.54 percent Mathematics classrooms.
7) Total 10.56 percent student responses 22.72percent Mathematics teacher responses it can be said that individual formative activities in mathematics like worksheets, graph plotting, relating axioms to real life and proving theorem were given.

8) While 43.75 percent Mathematics teachers had different criteria for different formative activities but the criteria like understanding of content, accuracy, imagination and observation were common for all the activities.
9) Total 15.46 percent student responses and 29.54 percent Mathematics teacher responses finding linear equation using graph, squwere root spiral given in the Mathematics activity books were the group activities given as Mathematics formative activities.
10) 8.06percent English teacher response and 4.95percent and 2.47percent student response reveal that 4.95 percent students and 2.47 percent students were given the opportunity to enhance speaking skills through formative activities like extempore and ASL respectively.
11) 3.30percent student responses and 5.64percent English teacher responses were in alignment to respond about autobiography writing being given for enhancing writing skills in English.
12) Total 4.83percent English teachers and 0.16 percent student responses reveal that information gathering FA activity like summarizing the news paper headlines were given, so 0.16 percent students were given the opportunity to summarize
13) Total 8.87percent English teacher responses revealed that reading comprehension activities were given as FA activity to improve the reading abilities and the 2.47percent student responses said that they were given comprehensions. Since both the responses were in alignment it can be said that 2.47 percent students could utilize the opportunity of reading comprehension.
14) 8.06percent English teacher responses and 1.65percent student responses were in consensus about the assessment of listening skills being done in the school as per the CBSE guidelines, so it can be said that 1.65 percent students could be assessed on their listening skills.
15) 66.66 percent English Teachers assessed FA activities on appropriate criteria like Vocabulary, pronunciation, presentation, body language, acting and Dialogue delivery for assessing drama; imagination, use of language(content),sentence pattern for assessing Creative writing; Creativity, audibility (modulation, intonation, fluency), language, correlation with the team for assessing radio show.

16) 7.24 percent and 17.39 Social Scienceteachers and 7.56 percent 21 percent students respectively said that source based analysis was given and research project was given as FA tasks. So it was confirmed that 7.56 percent and 21 percent students utilized the opportunity to do source based analysis and research projects given to enhance the cognitive skills.

5.1.1.3 Learner centered activities (except the formative assessment activities) for conceptual understanding of concepts

17) 50 percent teacher response and 33.63 percent student responses in alignment showed that demonstration of experiments given in the lab manual was done to explain the science concepts well. So 33.63 percent students were given practical demonstrations in Science as learner centered activity for conceptual clarity of Science concepts.
18) 5.45 percent student responses and 22.22 percent Science teacher in consensus revealed that smart class was used to show 3-D images for better visualization and clarity of concepts. So, total 5.45 percent students were taught through the learner centered activity of using smart class for improving their cognitive skills related to science.
19) The 38.46 percent students, 2.56 percent students and 39.74 percent students revealed that major topics of Science were taught by reading the textbook, summarizing the topic first and then reading the text and directly taught without the text respectively. Almost equal number of students i.e. 38.46 percent and 39.74 percent students were taught Science by only reading the text and without reading the text respectively.
20) 66.66 percent English teacher responses and 64.10percent student response said in alignment that role play was conducted based on plays given in the book. So it was confirmed that 64.10 percent students were taught English with the learner centered method of role play.
21) 45.68 percent student responses confirm that they were given the opportunity to read the chapter in English after model reading was done by the teacher.

22) 62.5percent Social Science teacher, 83.22 percent student responses and 75 percent classroom observation showed that the students were taught using discussion, debate and role play on Electoral politics, mock parliament, passing of the bill—money bill and statutory bill . So it was confirmed that Total 83.22 percent students were taught Social Science with the learner centered activities like mock parliament, discussion, and debate so as to enhance their cognitive skills.
23) 60.16 percent student, 22.76 percent student and 2.43 percent student responses revealed that they were taught Social Science major topics were taught by reading the text and explaining, explained without the text and conducted self guided teaching respectively. Thus 60.16 percent students were taught major part of the syllabus through reading the text and explaining.
24) 18.75percent teacher responses and 2.43percent student responses revealed that guided self study in history was done. So 2.43 percent students were given the opportunity to learn history through guided self study

5.1.2. Development and Assessment of Psychomotor Skills

5.1.2.1 Opportunities given for development of psychomotor skills in form of activities

25) 80.64 percent teacher gave the opportunity to the student for enhance psychomotor skills thorough activities like drawing activities like drawing geometrical diagrams and scientific diagrams, laboratory work, poster making , origami, power point presentation, salad making and map marking.

26) 5.1.2.2 Purpose of assessing psychomotor skill activities

27) Only 36 percent teachers could give appropriate criteria of evaluating the above activities with respect to psychomotor skills like accuracy, focusing the microscope, slide making for assessing Science laboratory activity; neatness and accuracy for assessing the Mathematics laboratory activity and accuracy, presentation, working, and principle behind the model for assessing the model

making. So the purpose of psychomotor skill enhancement was understood only by 36 percent teachers.

5.1.3. Development and Assessment of Affective Skills

5.1.3.1 Tools /techniques used to evaluate the affective skills

28) 24.19 percent teacher responses makes it evident that they used anecdotal records to assess the affective skills of the student in an objective manner

29) 48.39 percent teacher assessed the affective skills in consultation with all subject teachers teaching the class based on their general observations and 11.29 percent teachers just used general observations of the class to assess the affective skills, this has been confirmed by 11.29 percent student responses. So 59.68 percent teachers assessed affective skills based on the general observations and did not use any anecdotal records.

30) While 50.76 percent parent responses reveal the inappropriateness of life skills, values and attitudes descriptors of their child in the report card. Thus 59.68 percent teachers assessed the affective skills based on subjective method of general observation of student behaviour which were lead to the inappropriate description of the child's behavior.

31) 7.14 percent principals and 1.53 percent teacher asked ' What do you mean by anecdotal record….it means short stories na?. Hence it can be said that 7.14 percent principals and 1.53 percent teachers were unaware about the terms anecdotal record used to assess the affective skill.

5.1.3.2 Transactions of life skills, values and attitudes or the affective skills

32) 20.96 percent teacher responses revealed that morning assembly, CCA activities like poster making on environment conservation, disaster management classes, analysis of value based cinema, swachch bharat rallies enhanced the life skills, values and attitude and 50.76 student responses confirm such activities being conducted. So 20.96 percent teachers felt affective skills were enhanced through morning assembly and CCA activities.

33) Six percent classroom observation, 14.51 percent teacher's verbal response and 51.16 lesson plan analysis show incorporation of life skills in the subject teaching. So it can be said that 51.16 percent teacher planned incorporation of life skills, attitudes and values through subject teaching but only six percent teacher implemented the plan.
34) The impact of life skill and assessment was expressed by 81.53 percent parents as the improvement in thinking and some social skills like adjustment and co-operation but lack of enhancement of emotional skills. But 76.92 percent parent expressed the lack of enhancement of values, since the basic values of saying sorry and thank were not there in the students.

5.2. Enhancement of values, attitudes and life skills

35) There was a significant enhancement of life skills in the students in duration of one academic year as per the result of Wilcoxon sign rank test.
36) There was a significant enhancement of values in the students in duration of one academic year as per the result of Wilcoxon sign rank test.
37) There was a significant enhancement of Attitudes in the students in duration of one academic year as per the result of Wilcoxon sign rank test.

5.3. Feedback provided for written & performance based formative tasks

5.3.1 Oral/ written feedback for written tasks in the notebooks, answer books and assignments

38) The numbers of the teacher responses, parent responses and student responses were varied for that above aspect but since students were only one who best know about their notebooks while teacher may be teaching in other classes also, so student responses was considered for the findings.
39) 18.46 percent parents, 64.61 percent teacher responses and 78.46 percent student responses revealed that written comments were given by the teachers. Thus, for 78.46percent students; note books were corrected and motivating comments like

‘good , very good , seen’ or de-motivating comments like ‘incomplete’, were written but no comments for improvement were written.

40) 15.38 percent teacher’s responses and 13.84 percent student responses said that no written comments were given in notebooks. So, 13.84 percent students only got oral feedback on notebooks no written comments were given.

41) 3.07 percent parent responses, 4.16percent students and 7.69percent teacher responses, assure that the missed out points or steps were written by the teachers, in the notebooks. Since the students were the receivers of the feedback it can be said that for 4.16 percent students the teacher wrote the incomplete point and steps in the notebooks, which gave them a great feedback.

42) 8.06 percent teacher responses and 52.30 percent students response revealed that the oral feedback for FA tests were given individually to the students. Both the responses were in consensus but percentage wise not in equal. Total 52.30 students were given oral feedback on the written FA tests only when it was asked for feedback.

43) 77.41 teacher responses and 76.92 student responses confirm that common mistakes were discussed while the corrected answer books of FA tests were shown to the students. Both the responses were almost in alignment so it can be said that 76.92 percent students received oral feedback for all the common mistakes done by all the students in front of the class.

44) 3.22 percent and 12.30 percent teacher and student responses respectively revealed that the correct answers in place of incorrect answers were written in the answer books thought the number of student and teacher responses percent was varied but still both were in consensus. So, for 12.30percent students their teacher wrote the correct answers in place of incorrect answers in the answer books of FA tests to give them feedback.

5.3.2 Type of feedback given to low achievers may motivate the student

45) 72.58 percent teacher responses low achievers were given personal feedback but contradicting that 73.84percent student responses and 20.75 percent classroom observations show that low achievers were given feedback in front of the class. The student responses was supported by the classroom observations, so 73.84 percent students observed that low achievers were given feedback in front of the class.

46) 29.03 percent teachers said that separate feedback was given to low achievers and same was seen in the 20.75 class room observations.

47) 5.3.3 Feedback given for performance based formative activities like seminars, group discussion, role plays, demonstration of experiments

48) Six percent classroom observations and 47.68 percent student responses showed that feedback for performance based FA activities were given in form of 'good', 'very good' or on the confidence and presentation skills. While 70.96 percent teacher responses which says that students were given immediate criteria based feedback. Since the student responses were supported by the classroom observation it can be said that 47.68 percent students received judgmental words like 'good' and ' very good' as feedback on performance based FA activity .

49) 28.57 percent English rubric related to FA activity ,60 percent Mathematics rubric related to FA activity, 66.66 percent Science rubric related to FA activity and 50 percent Social Science rubric related to FA activity from the rubric analysis results shows that inappropriate criteria of assessment for formative activities were given. So, criteria made for 28.57 percent English FA activities,60 percent Mathematics FA activity, 50 percent Social Science FA activity and 66.66 percent Science activity were inappropriate as per the type of activities.

5.4. Diagnosis and remediation of learning difficulties for improving student's achievement

5.4.1 Regularity in diagnosis of the students learning difficulties

50) 42.18percent teachers diagnosed learning difficulties after the completion of one chapter but the teacher did not give evidence about any diagnostic test that was designed.

51) 58.47 percent teacher responses reveal that the student difficulties were diagnosed based on the type of queries /doubts/questions raised by them and the way they respond to the questions asked by the teachers during the teaching learning process

52) 38.97 percent teachers revealed that the learning difficulties were identified while correcting the exam papers, class tests and notebooks

5.4.2. Tools/Techniques used for diagnosis

53) All 100 percent teachers did not make any diagnostic test for diagnosis of the learning difficulties.

5.4.3 Provision of time for remedial teaching

54) The percent of responses given by principals, teachers, students, clas observations and parents were varied but those whihc were in agreement were considered and since the students were the main stakeholders for remedial practice the finding was expressed in that form

55) 15.38 percent student, 15.38 percent parent, 21.42percent principal and 12.90percent teacher responses revealed that the remedial classes were arranged weekly twice during teachers stay back days. So it can be said that 15.38 percent students had provision of attending remedial class weekly twice but it was not compulsory.

56) 3.22 percent teacher responses and 6 percent school observation show that daily compulsory remedial classes were conducted for weak students. Since the school observations were the direct experience of the investigator, it could be said that in 6 percent schools had daily compulsory remedial classes after the school for slow learners .

57) 27.69 percent student, 27.69percent parent, 14.28percent principal and 25.80 percent teacher responses confirm that there were compulsory remedial classes on 2nd and 4th Saturdays when the school was not working but teachers were present. So it can be said that 27.69 percent students had the provision of compulsory remedial classes weekly twice.

58) As per 29.02 percent teachers, 12.30 percent student, 12.30percent parents, and 7.14percent principal responses remedial classes or co-curricular activities could be conducted in the circle period or the zero period allotted in the time table. So, 29.02percent students had the provisions of having remedial class in zero period.

5.5. Modifications in the teaching learning strategies; learning environment provided to the learners, based on the type of learners

5.5.1. Duration of the training and its impact on teaching learning and evaluation process

Impact of attending one training

59) the impact of one day training program was experienced by 4.83 percent teachers on the teaching learning process as they started using discussion method in their class.

60) Impact of one day training program experienced by 4.83 percent teachers was that they could think out of the box activity for formative assessment and could do criteria based assessment

61) the impact one day training on assessment was that 3.33 percent teachers could distribute marks for different formative activities in each formative assessment activity.

62) 3.22 percent teachers said that two day subject specific training program impacted on the teaching learning as they could use activity based approach for the teaching learning process.

63) 6.45percent teachers learnt different ways and means to evaluate life skills, values and attitudes, irrespective of getting a subject specific or general training but the impact on the assessment of life skills and attitudes was seen only in 24.19 percent teacher used the anecdotal records to objectively assess the life skills, values and attitudes.
64) 4.83 percent teachers learnt assessment practice from the colleagues and through school based meetings.

Impact of attending three or more trainings

65) 16.12 percent teachers who underwent the subject specific three or more trainings improved their teaching learning methods started using more of discussion and lab integrated teaching and this was observed by 28.57 percent principals. Both the responses were different percentagewise but show consensus. So 62.5 percent teachers improved the teaching learning process after three or more trainings
66) 9.67 percent teachers who underwent three or more trainings also improved the assessment of FA activities through the use of rubrics and also improved in evaluating the life skills values and attitudes and this was observed by 28.57 percent principals. So 62.5 percent teachers improve the assessment of CCE activities after three or more trainings

5.5.2. Orientation of the teachers with respect to the CCE components and the agencies involved in it

67) 21.42 percent principals confirmed that the teachers were given subject specific training every year for 2 to 4 days in the in-house training sessions in the schools the resource persons from CBSE or other institutes were called for the training .
68) Total 64.28 percent of the principal responses revealed that they did not organize compulsory training program for teachers, they just sent the teachers to other schools to get training when it was organized for one day or gave one day training and gave training when publishers came to their own school

69) Total 100percent principal responses indicated that CBSE did not make training for teachers compulsory.

5.5.3. Use of formative assessments results by the teachers to modify the teaching strategies to address the identified difficulty and build a better learning environment

70) Total 80.39 percent student, 50 percent teacher responses and 52 percent classroom observations teacher kept the classroom environment informal by cracking jokes , explaining each step/point one by one, bringing extra information about the topic and by allowing the students to ask their doubts, share their ideas and brought extra information. Thus 50 percent teachers could make congenial environment for the students to learn well.
71) 10.76 percent student responses and 3.77percent classroom observations reveal that the percentage of class room observations and students responses were in alignment. Since the classroom observations were of different teachers it can be said that 12.5 percent teachers could learn from the teachers who connected the real life with the topics of study.
72) 22.64 percent classroom observation and 17.74percent teacher responses reveal that they favored silent and disciplined class room for syllabus completion and used lecture method and did not organize the teaching points well as per the level of the student. So 18 percent teachers used lecture method for teaching and preferred silent disciplined class for syllabus completion.
73) Classroom observations show that 1.61 percent times the verbal feedback was in an undesirable manner and 6.25 percent times the feedback was not given though there was a scope to do so.
74) 11.29 percent teachers modified the teaching learning process by using smart class and teaching based on the interest of learners and in 4.83 percent classes there was learner centered approach used for teaching. Both percentage from classroom observation and teacher responses were not in alignment but were in the same direction. So it can be said that 11.29 percent teacher tried to modify the learning environment based on the needs of the learner.

5.6. Orientation and Feedback given to the parents

5.6.1. Regularity of feedback given to parents about scholastic and co-scholastics aspects

75) 16.92 percent, 32.25 percent and 44.61 percent parent responses confirmed that there were six, two and four PTMs in a year.

5.6.2. Purpose of PTMs

76) 85.71 percent principal 70.76 percent parent responses said that the purpose of PTMs was just report reading, showing the answer books and describing some undesirable behaviour of the students. 70.76 parents also added that the feedback about behaviour may or may not be appropriate. Thus it can be said that 70.76 percent parents just could get the scholastic feedback in terms of grades scored.

5.7 Provisions for participation in co-curricular activities and the assessment of those activities

5.7.1. Provisions for the physical and health education/ sports activities and its assessment

77) 30.76percent, 15.38 percent, 6.15 percent and respectively had provisions to learn indigenous games like kabbadi, kho kho and malkham , athletics and through expert coachers

78) Provisions for learning Hockey, Basketball, volley ball, cricket and football through expert coaches was offered only to 7.69percent; 55.38 percent; 53.84 percent; 15.38 percent; 61.53percent students respectively

5.7.2. Orientation given to co-curricular activity teachers for assessment

79) 50 percent teachers teaching games like basket ball, cricket, volley ball and football based graded the student s on criteria like discipline, interest, regularity and rules followed while playing which were different than the criteria given in the teachers manual like agility, endurance, coordination, analytic aptitude. So 50 percent teachers did not grade the students as per the criteria given by CBSE.

80) All 100 percent co-curricular activity teachers said that they were neither oriented about CCE nor were shown the CCE teachers' manual, the coordinator or the principal gave some criteria printed on which the students were graded

5.8 Opinion of teachers, parents, students and principals regarding CCE implementation

81) 50 percent principal responses felt that CCE teacher manual was resourceful in planning and assessing the CCE activities; 45.16 percent teacher and43.54percent teacher responses respectively revealed CCE teachers manual helped in planning and assessment of the CCE activities. Thus 45.16 percent and 43.54 percent teachers could get help from CCE teacher manual.

82) 35 percent principal responses, 31 percent student responses, 25 percent teacher responses and 19 percent parent responses revealed the ease of scoring due to the inclusion of formative assessment scores in the final result.

83) The students responses and teacher response percentage was less i.e.14.54percent and 13.46percent respectively, but were in alignment. Thus it can be said that almost 14percent teachers and students feel that communication and presentation skills have improved in the students due to CCE

84) Only 29.09 percent teachers and 15.09 percent parents revealed that no mugging up takes place and learning has become interesting due to different modes of teaching like classroom activity and learning by doing activities like assignments, project and other practical works. Thus it can be said that only 29percent teachers and 15percentparents feel that de-emphasis of memorization has taken place.

85) Twelve percent student responses reveal that the CCE was a good system because what was once learnt was not to be retained for the next exam.

86) Only 7percent teachers and 4percentparents felt that actual competition had reduced, due to grading system and the semester system.

87) 40.38percent student 7percent principal 9percent teacher and 26percentparent responses said that semester system and formatives tests have reduced fear for exams in students.

88) Almost 16percent principals, 6percent teachers and 5percent students feel that the lower order abilities like memorizing and comprehension and content retention

ability were being neglected in CCE since the aim was developing higher order thinking, they opined that there were many students who didn't even have the lower order ability of memorizing the content then how can the higher order thinking be developed.

89) Almost 29percent principals,12percent students,13percent teachers and 51percentparents feel that formative assessment activities do not enhance the knowledge and they were too time consuming due to which the syllabus was not completed in time.

90) 25.53percent teachers, 11.11percentparents and 12.30percent students felt that the formative assessment tests and activities wasted lot of time and kept the students in stress. The parents don't take students for family functions because this would affect their grade, this attitude of the parents also shows that there was a great need for the parental mindset to think away from the grades and marks for better CCE implementation.

91) The key training needs highlighted were specific interactive training session by 52.38 percent teachers ; lack of subject specific workshops for innovative teaching methods by 42.85 percent teachers, lack of orientation about interdisciplinary projects by 14.28percent teachers; lack of demonstration of assessment criteria for different type of activities. Lack of training for co-scholastic aspects was highlighted by 33.33percent principals and 16.66 principals said that there was lack of resource persons who were expert in the field of CCE who could train the teachers.

5.9. Challenges faced by the teachers, parents and principal and students with regard to CCE implementation

5.9.1. Challenges related to co-scholastic aspects

92) 25 percent teacher revealed that assessing the co-scholastic aspects using 5-point scale was challenging and that more descriptive indicators were required to conduct co-scholastic assessment.

93) 25 percent teacher said that striking a balance between maintaining the anecdotal records for the students' behaviour and handling their indiscipline and adolescent specific behaviours was a challenge

94) 12.5 percent teacher said that there was lack of clarity whether to conduct co-scholastic activities separately or to be taught in an integrated manner with the scholastic subjects.

95) 16.66 percent principals revealed that since physical education and health education and sports were given separately; planning activities related to health and physical education was a challenge

96) 33.33 percent principal responses revealed that there was scarcity of competent teachers who could conduct co-scholastic activities was a challenge.

5.9.2. Challenges related to scholastic aspects

97) 44.44 percent teacher responses revealed that planning formative activities and designing the teaching strategies based on different intelligences of the students was a challenge.

98) 66.66 percent teacher responses showed that managing time along with execution of designed formative activities and teaching strategies and ensuring student involvement was challenging.

99) 44.44 percent teacher responses indicated that ensuring students learning through activities and assessing them based on criteria was a challenge.

100) Lack of comprehensive assessment of the content learnt in one academic year leads to no retention of the learning after the semester was over hence the memorization ability of the students to remember large content which would be required in higher classes XI was lost as per 49.99 percent principal responses

101) Provision for timely feedback to parents and students and timely planning for the formative activities and conducting remedial classes was a challenge as per 16.66 percent principals

102) Lack of content knowledge in the teachers was another challenge voiced by 33.33 percent principal responses

5.9.3. Challenges related to Documentation

103) Documentation in terms of writing descriptive indicators for each child; maintaining the anecdotal records and making the rubrics was challenging as per 18.17 percent teacher responses and 83.33percent principal responses.

104) Evidence preservation along with maintaining quality of teaching was a challenge as per 50 principal responses and 59.09 teacher responses

105) Assessment of all the skills given by CCE objectively, for 40 students in a class, was challenging as expressed by 16.66 percent teacher responses

5.9.4.Challenges related to administration as given by the Principal responses

106) As per 12.5 percent principal responses making the parents understand the CCE guidelines was a challenge

107) As per 25 percent principal responses training the fresh teachers to plan their lessons and activities as per CCE was a challenge

108) As per 12.5 percent principal responses getting experts in the field of CCE so as to training the teachers was a challenge

109) Managing teachers' negative attitude towards slow learners as they score more due to formative activities was a challenge as per 12.5 percent principals.

5.10. Discussion of the Findings

In the discussion certain key observations that were raised out of the findings, interweaved with the studies reviewed with respect to Continuous and Comprehensive Assessment. The key points that emerged in the findings have been section wise discussed.

The investigation was about the implementation of CCE in CBSE schools. The CBSE schools were the pioneers in implementing CCE in 2009, hence those schools were taken up for the study to find out the implementation of different objectives of CCE.

The study focused on finding out the opportunities given for development of cognitive, psychomotor, affective skills, opportunities given for the development of scientific, aesthetic, literary and eco and wellness related skills also the assessment of the skills and

the orientation given to the teachers for assessing these skills. However, the other aspects like giving a learner centered environment to the learners by modifying the teaching strategies as per the performance of the students in the formative tests, finding the teaching through learner centered approach and methods to de-emphasize memorization was an important part of this study. The Feedback given to students and parents about their scholastic achievement, the diagnosis and remedial practice for slow learners and learners' with learning difficulties was also the focus of the study. Training play a big role in implementation of any new system thus the challenges related to teacher training and the training needs were also identified.

There were two ways to enhance the cognitive skills one was through the formative pen paper tests and the other was through opportunities provided in terms of FA activities for cognitive development.

The introduction of HOTs by CBSE in the question papers was to included the analysis and synthesis level of questions in the questions papers to give the students an opportunity to develop higher order thinking. However the findings based on FA test paper analysis showed that though 40 percent Science papers, 54.54 percent Mathematics papers, all 100 percent English question paper, and 33.33 percent Social Sciencequestion papers had HOTs questions but it was not in consensus with weightage mentioned by 70 percent teachers in their responses; moreover 30 percent teachers did not mention any weightage at all. This shows that the teachers had heard about HOTs , they themselves were making HOTs but were not able to show the weightage that they gave to HOTs questions. The formative assessment is done during the teaching learning process to ensure whether learning has taken place or not, so it is obvious that there will be no specific weightage assigned to different level of questions, moreover it is a sort of feedback to the teacher for improving the teaching learning strategies. But since CBSE had communicated that the summative tests will have HOTs questions, teachers thought that there should be weightage assigned to each level of questions so they gave a structure of weightage in the questionnaire to show that they followed a structure which did not match that weightage in their FA test papers. The structure mentioned by the teachers included weigthge for knowledge understanding and application level questions

only and no HOTs were shown may be because Indian school system has believed that pen paper tests can only measure the skill related to knowledge , understanding and application level question. This may due to the false aim of formative assessment been communicated to the teachers by CBSE in form of maintaining the evidences of the FA test papers which shifted their focus of getting a feedback on teaching learning from FA tests to evidence production and introduction of different types of questions. Also the lack of consensus between the weightage to different levels of questions in FA test papers and weightage mentioned in the teachers' questionnaire show that there was no fixed structure for FA pen paper tests. But the unawareness of teachers about the HOTs questions that they themselves made was something to be further investigated.

The FA activities were the means to provide opportunities to the student to develop the different skills like cognitive psychomotor and affective skills and scientific and literary skills but the though there were a number of activities enlisted by the students and the teachers the activities which arise out of consensus of both the respondents were model making and investigative research in science. 55.81 percent teachers and 17.64 percent teachers gave investigative project and model making which might have enhanced the cognitive skills of the students, but only 17.64 percent and 11.29 percent students respectively utilised the opportunities. Thus it seems that though the investigative project was given by majority of the teachers but only few students did it may be because worksheets, graph plotting, relating axioms to real life and proving theorem were given was in form of a competition or an optional activity which was not compulsory for all the students to do. While around 18 percent teachers gave model making and 11 percent could utilise the opportunity so it can be said that though less number of students did model making but they were given model making as a compulsory activity. So it can be said that though the number of activities mentioned in the teachers manual for science formative activities were large only few (18 percent) teachers followed it and about 30 percent students could be benefitted.

Only 22.72 percent mathematics teachers gave FA activities like worksheets, graph plotting, relating axioms to real life and proving theorem in Mathematics which might have aroused the interest of the child to learn the respective topics with interest. While

29.54 percent teachers gave activities from the activity book as formative activity like finding linear equation, making square root spiral, the method. This shows that only 23 percent mathematics teachers gave FA activities which were to be thought about and done by the students themselves and the around 30 percent Mathematics teachers gave formative activities which were explained in their activity book. Thus the opportunities for enhancing the cognitive abilities in mathematics was given by only 23 percent teachers and these opportunities could be utilised only by around 11 percent students only.

Total 8 percent teachers and 4.83 percent teachers gave activities like extempore (radio show and other activities) as ASL activity and summarising the newspaper articles as FA activity respectively and this opportunity was utilised only by 6 percent and 0.16 percent students respectively. This shows that only few (about 13 percent) teachers focused on giving some new activities for enhancing the cognitive skills related to English. While only about 6 percent students could utilise the opportunities given.

While source based analysis and research projects were given by 7.24 percent and 17.39 percent Social Science teachers only and only 7.56 percent and 21 percent students could take in were given. Thus the number of students and teachers who could do source based analysis and who gave source based analysis for FA activity is same and the number of students who could do research project and teachers who gave research project was nearly same. This shows that though number of teachers who gave non-traditional FA activities were less but atleast few students (about 30 percent) could get its benefit.

Thus when the opportunities given to enhance cognitive skills is considered in terms of all the four subjects, it can be said that none of the four subjects have more than 50 percent of students getting the opportunity to do a non-traditional FA activity to enhance their cognitive abilities. But atleast around 30 percent students could get the opportunity to enhance the cognitive abilities through the mathematics FA activity and Social science FA activity. However 16percent principals, 6percent teachers and 5percent students felt that lower order abilities like memorizing and comprehension and content retention ability were being neglected in CCE as the focus was achieving higher order thinking. This might be due to the reason that the actual learning was not taking place, because

memorizing and comprehension were lower order thinking skills but they were required to acquire the higher order thinking skills. Also as per 50 % principals the retention ability of the students became less as the evaluation became continuous, and there was no comprehensive test to assess their learning in the entire year, so in the higher classes the students faced the problem of retaining what they have learnt and sometimes fail.

However the assessment criteria for these formative activities were more focused on content, understanding and presentation in Mathematics and Science. In Social Science and English the presentation skill were more focused in the rubric. However the cognitive skills will enhance based on the opportunities given by the teacher to think and reflect hence the teaching learning process should be such. Thus, the presentation skills as the main criteria for assessing the different activities in all the four different subjects. The focus on presentation skills improved the confidence, presentation ability of the students and also addressed their fear to face the crowd. But in subjects like science and mathematics the conceptual understanding and use of the scientific and mathematical principles should also be used. While the skills like listening, reading and writing should also be focussed in English and social science should also have the assessment components like social awareness, sensitivity shown towards social issues.

The findings of the study revealed that around 38 percent teachers taught without reading the text but directly explained and discussed in Science and mathematics classes, however the learner centered methods used were use of smart board or power point presentation in Mathematics and Science which just aided the teaching didn't give a scope to enhance cognitive skills. While in English and Social Science around 45 percent teachers read the text and explained the content, the activities like role play given in the English text and doing mock parliament, debate and discussion was practiced in SS classes but major part of the syllabus was completed using lecture method. This shows that the teaching learning process has shifted from totally reading the text and explaining to inclusion of some of the activities like role play debate discussions but those efforts were only put by 40 to 45 percent teachers. The remaining teachers have to be revived and trained to use a learner centered teaching learning process. However the classroom climate or the learning environment plays a vital role in the learning process. The

findings show that 80 percent students liked to learn in congenial environment where the teacher keep the environment open to sharing of doubts and ideas and also make the environment light by cracking jokes in between, but this was been done only by 50 percent of the teachers. While there were around 13 percent students who liked to learn in a class where the teacher connected the topic with the real life examples but this could be done only by 13 percent teachers. There were around 20 percent classes where the teacher strictly used the lecture methods just for the sake of completion of syllabus. Thus there was shift in the learning environment atleast by 50 percent teachers from strict discipline classrooms to an amicable environment where the students could raise their doubt queries and interact with the teachers.

It can be seen from the above discussion that around 30 percent of mathematics and socials science teachers and only 18 percent and 13 percent Science and English teachers could give non –traditional formative activities to enhance the cognitive skills of the students. This may be due to the difficulty in planning the FA activity for different intelligence level students and the difficult in execution of the planned activity as voiced by 44 percent teachers in their responses. However, the planning of FA activity might be also difficult for the novice teachers either because they are not trained or because they lack content knowledge as said by 25 percent principals.

Also these 44 percent teachers had revealed designing teaching strategies to suit the different intelligence levels of the students was also difficult this might be the reason that almost 50 percent teacher could not change the traditional way of teaching i.e. reading the textbook and explain. However though the number of teachers who used the traditional method of teaching appears to be only 50 percent the effect of it was on 85 percent students who said that they had to rote memorise the concepts for the exam and only 15 percent students felt they did not rote memorise the topics. The rote memorisation has two reason one is discussed above the use of traditional methods of teaching and another is the lack of feedback given to the students on their written activities and performance based activities.

The development of the students was much dependent on the Feedback given to the students for their improvement and that was one of the objectives of CCE, to improve

child's learning through continuous feedback in about the performance in different scholastic and co- scholastics aspects. Feedback plays an important role for students to get a directions for further improvement, for parents to support the child in improving the achievement of the child , feedback for teachers help them in improving the teaching learning process. FA tests and activities were aimed at giving feedback to teachers, students and parents for the above mentioned purposes.

However the findings show that for the written tasks like notebook tasks and FA written tests about 78 percent of the students got general feedback in written form and only four percent got specific feedback for improvement in written form. About 76 percent students got only general oral feedback for formative pen paper tests and specific oral feedback was given only when the students asked for it. So the feedback system had no much change as compared to the traditional system of feedback which was in terms of good, very good, incomplete work. Hence the main aim of giving feedback for improving the student's performance was only seen in few cases (four percent). Hence around 76 percent students just got general oral and general written feedback on written tasks which might not have helped them to improve their performance.

The feedback given to 80 percent students for written FA performance tasks were in form of judgmental words like 'good' 'very good' 'incomplete' only 20 percent students received the feedback which were in form of the missing points and steps in the answer that they wrote. Such feedback about the missing point/ steps in the FA activities would help the student to improve on the performance next time. However, none of the students received specific feedback on the performance based FA activities like role play, model making , presentation for their improvement. The teacher graded the students on a rubric which had the assessment criteria but the students were given feedback in terms of 'good' 'not good' 'very good'. The actual purpose of FA activities was to help the students improve the cognitive, psychomotor and affective skills and other skills, but if the skill based feedback was not given how would it improve. Since the aim of formative assessment has always been giving feedback to the students and teachers the investigator has identified whether the skill based feedback for improvement or the feedback on written task was given or not for improvement of the students. If the aim of FA activities

was to give feedback on skill and written performance then it should be oriented to the teachers or the teachers should have been trained to make the rubric and give criteria based feedback but all the training component focused on the use of different methods of teaching , the type of activities to be conducted as FA activities , the criteria to be used for assessment of the activities , inclusion of life skills values and attitudes but none of the training components mentioned by 62 percent teachers related to the above mentioned aspects that should have been part of feedback given to the students.

If the feedback that the teachers took up from the FA results to modify their teaching learning strategies then its seen that the only modification in teaching learning after knowing the weak FA test results was use of smart boards and use of power points to explain the students in a better manner. However, it can be said that neither the FA scores did not reveal the need for the teacher to change the teaching strategies nor the teachers took up the feedback given by the FA assessment to improve the teaching learning process. This aspect of teacher not taking up the feedback to modify the teaching learning process or the teacher taught so well that no feedback for improvement was shown should be further investigated. Thus the objective of CCE to have an effective Feedback system to give feedback to students for improving their achievement or performance and to give feedback to teachers for improving the teaching learning strategies could not be implemented properly. Feedback is given to all the students but slow learners and students having learning difficulties should be timely identified using diagnostics tests as indicated in CCE teachers' manual given by CBSE.

The steps of diagnosis and remediation mentioned in the literature says that diagnosis and remediation should be error centered or student centered. The five steps of diagnosis and remediation include : identifying the students committing errors(who were the pupils having trouble?); identifying the concepts for which they have trouble(where the errors were located?); finding out the causes of the errors committed(why the errors occur?); finding out the remedies as per the causes of errors identified(what remedies were suggested?); finding out how to prevent the errors(how can the errors be prevented?) given by Ross and Stanley in 1985. But findings show that 59 percent teachers diagnosed the learning difficulties through the student oral responses and queries raised by them in

the class. While 39 percent teacher diagnosed while correcting the formative test papers and notebooks. However no systematic steps of diagnosis were followed. The remediation as per Ross and Stanley steps was to be done on the weak basic concepts but the teachers almost 96 percent teachers considered solving the doubt of the students as the remedial practice. The remedial period was not in the school time table either the students had to wait after the school or the zero period was utilise for remedial class. But the class room observations show that the zero period were used 50% times for completion of the syllabus or organizing some co-curricular activities.

However none of the orientations nor the training program told the details about the diagnostic and remedial practice to the teachers. Hence this aspect of CCE to improve student learning through diagnostic and remedial practice was also a weak link that could not sustain the CCE in the schools.

The above points of discussion show that the teachers were neither importance of Students and parent feedback nor had complete idea about diagnosis and remedial practice. None of the 62 percent teachers who underwent training described about the aspects of feedback and diagnosis and remedial practice being discussed in the training program. The major findings show that 16.21 percent teachers who underwent one training program started using discussion method for teaching and learnt how to distribute marks for the formative assessment activities. While changes in teaching learning process revealed by 62.5 percent teachers who underwent three or more trainings like allowing the students to share their ideas, making congenial environment in the classroom solving their doubts were certain the things which every students who does B.Ed is taught in form of theories of learning. So it can be said that though it seems that large number of teachers around 62 percent were given three or more than three trainings the impact was not significant. However the training was mainly given by the publishers like Madhuban and Codova who used to come to showcase their book and less by the experts. The training by the experts were given only by those schools which were ready to pay the experts, as CBSE had not provided any source for getting free training. There were 14.52 percent KVs teachers who had to compulsorily attend one week subject specific training program of KVS(Kendriya Vidyalaya Sanghathan) once in 5 years, but

they said that they were given subject enrichment activities and less about the pedagogical aspects. Though the number of untrained teachers was meagre i.e. about 20 percent, the impact of training on the trained teachers was not very effective. The findings shows that 50 percent teachers used traditional method of reading the text and explaining and proper feedback was given only by 20 percent teachers on written activities; only 30 percent of mathematics and socials science teachers and only 18 percent and 13 percent Science and English teachers could give non –traditional formative activities to enhance the cognitive skills and 44 percent teachers had problems in planning formative activities and also the teaching learning strategies . Moreover the need to have teachers an interactive training program by 52.38 percent, need for training to conduct co-scholastic activities 33 percent teachers and the need to conduct training for teaching innovative teaching methods of 42.85 percent teachers itself reflects that the components of the training program neither addresses the co-scholastic assessment nor the improvement in teaching of scholastic aspects. All these impact of training program and the training needs highlighted by the teachers show that though 62 percent teachers were trained the training lacked the aspects like assessment of co-scholastics, introduction of innovative teaching methods and an interactive training program where they could share their needs.

The reasons for the lack of quality training might be that most of the schools affiliated to CBSE are private schools and the lack of training given by the experts show that the schools were less bothered on conduct of better teaching learning through well trained teachers but more concerned about the different FA activities being conducted and the its documentation. However there were 21.42 percent principal who said they had in-house training programs every year but getting a good resource person for quality training for all aspects of CCE was challenge. Also all the principals (100 percent) said that there was no compulsory training given by CBSE. So lack of proper experts for training the teachers related to CCE aspects and lack of free compulsory training provided by the CBSE to all the teachers can be judged as the reason for poor training.

Thus it can be seen from above points of discussion that the aim of CCE to de-emphasise memorisation was achieved only for 15 percent students and efforts were put only by 50

percent of teachers. But in the course of de-emphasising memorisation the teacher tried to ficus on higher order thinking skills and neglected the lower order thinking skills like memorising and retention of the content. So in the process of bringing higher order thinking in students and making the evaluation continuous the retention ability of the students was lost and which affected his performance in the higher class where annual system of exams was there. Though the continuity in evaluation was to enhance learning and reduce stress of exams the stress of exams was reduced only in 40 percent students. However in a positive sense it can be seen that slowly the teachers were coming out of their traditional mindset and were trying to use non-traditions methods of teaching. But changes in social system comes slow so if CCE could have been kept in school system for still some more time more positive changes would have occurred. But the de-emphasis of memorisation was also not achieved because the effective feedback system to give specific feedback to students for their written and performance based activities were not there and the teachers also did not use the result of formative activities to modify the teaching learning process in the classrooms.

The aim of CCE was also to reduce the stress of the students due to examination could be achieved for 40 percent students. Though 70 percent students said that the ease of scoring increased due to the FA activities, but the stress of exams was reduced only in 40 percent students as per the findings. Thus even the continuous assessment also created stress of exams in almost 60 percent students though the ease of scoring was there.

However the other aim of CCE to reduce competition in students due to grading system was experienced by only four percent parents and seven percent teachers. So the aim of introducing grading system in secondary schools to reduced competition was also not achieved as seen in the finding. Thus the stress of examination was reduced in majority of the students due to ease of scoring but the competition did not reduce much.

The reduction in competition for grades also has to do much with the orientation and feedback given to parents. However the feedback given to parents were also same as it was given earlier i.e the parents were shown the test papers shown the report card and some two or three behavioural observations were told to the parent. The findings show that almost 70 percent parents were given the feedback in the same manner as mentioned

above. However if FA were to give feedback to all stakeholders namely teachers students and parents then the frequency of PTM should be more i.e. there should be PTM after every FA and SA test. There were total 6 assessments consisting of four FAs and two SAs but findings shows that only 17 percent parents were called for 6 PTMs, almost 45 percent parents had only four PTMs and 33 percent had only two PTMs in a year. Thus the feedback mechanism was not as good as it could have been if the teachers were oriented to given proper feedback to students and parents both for improvement in scholastic and co-scholastic aspects both. In the PTMs also the co-scholastic feedback was related to only expression of two or three general behaviour observations. Thus nothing much changed in terms of giving feedback to students and parents as per CCE. Thus this system of just evaluating the student formatively and not giving enough feedback for the improvement might also be the weakness that led to the closing of CCE.

However though the new uniform system of assessment has assigned 20 percent weightage to formative assessment, 80 percent weightage to summative assessment, out of 20 percent of formative also 10 percent was for written tasks. Hence the feedback related to co-scholastic skills that was to be given may now not be needed. The feedback system and the diagnostic and remedial practice much focussed on the enhancement of cognitive skills in the students but the allround development described by CCE scheme also encompassed enhancement of affective and psychomotor abilities

The affective skills were to be assessed in terms of the life skills, attitudes and values possessed by the students. if the affective skills had to be assessed it was to be first taught or demonstrated. From year 2014 CBSE had notified to that life skills, attitudes and values in an integrated manner. No practical training was given to the teachers for integration of affective skills though CBSE had told to teach it in an integrated manner, still 51 percent teachers planned the integration of life skills, attitudes and values which were evident in their lesson plans and 20 percent teachers said that it has to be learnt through prayer assembly activities. Though 51 percent teachers planned the integration of life skills, attitudes and values it was implement only in 0.018 percent classes, which

shows that the planning was just done to show school inspection team about the planning of integration of affective skills in the lessons while actual implementation was lacking.

However though 29 percent teachers do not integrate the life skills attitudes and values in their lesson plans, analysis of Likert scale scores of the pre test and post test show that the students have significantly improved on the life skills, attitudes and values during one academic year. The significant score might be due to improvement in the social and thinking skills as said by 81percent parents. But 76 percent parents felt that their child could not even use the basic values of saying sorry and thank you. However this significant difference includes the values and life skills imbibed from outside school also since no measures were taken to exclude the effect of external factors. However only 0.018 percent class room observations show the efforts put to sensitize towards the values.

CBSE suggested Affective assessment to be done based on the anecdotal records, so that objective assessment could be ensured. But findings shows that only 24.19 percent teachers used the anecdotal records to assess the affective attributes the remaining used general behaviour observations to grade the students. Since using the tool like anecdotal record was a new initiative under CCE, enough orientation and training was to be given but the findings show that only 8.06 percent teachers were oriented about writing the anecdotal records and thus almost 50 percent parents felt that the descriptors written in the report card about the affective characteristics were not appropriate to their child. Training improves the affective skill assessment (Rao and Rao,2004). Hence the assessment of affective skills could not be done effectively by teachers due to lack of orientation and training.

The reasons for not maintaining the anecdotal record might be because the teachers had said that maintaining the anecdotal records and to handle the indiscipline of students together and also teaching the life skills attitudes and values was challenging. However the need for getting a training in teaching life skills, values and attitudes in an integrated manner was highlighted only by 30 percent teachers which shows that the only 30 percent teachers wanted to learn how to integrate life skills, values and attitudes in the lesson the remaining teachers were already knowing about it. Around 33 percent principal, said that

getting a trained teacher who can conduct co-scholastic is a challenge, this shows their intentions to get trained teachers from outside and lack of interest in training the existing ones.

Thus affective skills could not be taught in an integrated manner because teachers lacked orientation and training in that and moreover to maintain anecdotal records was a challenge because teachers were involved in addressing student indiscipline along with rather than focussing on maintaining the anecdotal records or teaching life skills, values and attitudes in an integrated manner.

CBSE through CCE also wanted to enhance the psychomotor abilities through its proper assessment. Assessment criteria for psychomotor abilities were given by only 36% teachers which indicate that only 36 %these many teachers are either aware about the psychomotor assessment or only these teachers assess the student for the psychomotor skills. However, psychomotor development also links with health and physical education and the outside the class activities like sports.

Another weak link in CCE implementation was the assessment of physical and health education. Considering the co-curricular activities the finding show that around 61 percent students , 55 percent students and 53 percent students were taught the games like football basket ball and volley ball and indigenous games like kho -kho, malkham was taught only to few students i.e 15 percent and 6 percent students respectively. However the assessment of the sports activities was to be done based on criteria like agility, endurance, coordination, analytic aptitude; but the teachers assessed based on discipline, interest, regularity and rules followed while playing. All the co-curricular teachers said that they were never shown the teachers manual neither were they oriented about CCE; just they assessed based on the criteria given by the principal. The Principal might have not given the criteria of assessment as given in the manual because there was no clear mention of how to assess the health and physical education and how to assess the sports activity. Total 7.14% principals said that there was no clarity in how to assess the physical and health education and sports and whether they have to be separately assessed. While separate criteria of assessment were given for most of the scholastic activities like debate, discussion was clearly given. When the book that gives clear guidelines to the

teacher is made in a biased manner how can it be expected that the co-curricular activities will be given equal importance as scholastic for all round development of the students. Hence it is imperative that the teachers manual itself which provided guidelines for CCE implementation, the scholastic aspects guidelines were clearly given and co-curricular activities were less focussed.

Moreover, the other aspect of co-curricular activities where clubs were to be made to enhance scientific skills, aesthetic skills, literary skill and performing arts skill. But findings show that only two percent, 36 percent and eight percent students had scientific, aesthetic and literary clubs. All the remaining students were given the literary and scientific activities in form of competitions where it was not compulsory for them to participate and moreover would not get any feedback also. Another new initiative to have compulsory yoga for all students was achieved but findings show that the teachers assessed the students on different criteria like posture, breathe control etc but did not give any feedback related to it. Thus the all round development through the physical and health education and co-curricular activities also did not function properly in every school.

The weakest aspect which could not help the teacher and Principals to implement CCE was training. Training was very important for any teacher to improve and used new strategies of assessment and teaching and it improves the teacher performance. But findings show that there was lack of experts who could connect the subjects to the CCE objectives, lack of co-scholastic training and lack of subject specific workshops which would allow the teacher to share their problems and find a solution to it.

The basic opinion of the teacher with respect to the CCE was that the slow learners could score better grade due to FA activities and due to this they had a negative attitude towards the slow learners and it was expressed as a challenge by the principal to address this challenge. However documentation and preservation of the FA evidences was also a challenge for the teachers and principals. CBSE focused document preservation which was challenging as per 59percent teachers and 50 percent principals, along with quality teaching. This preservation of documents shifted the focus of the teachers from the teaching learning process to document making and preservation. The option that schools

had was to assign the document preservation task to some separate staff who can focus on its preservation but this was done only by 14.28 percent principals.

Lack of teachers with good content knowledge was also a challenge for the Principals. Teacher described the challenge of observing the student behavior and performance on different criteria was a challenge, teachers also highlighted addressing the needs of adolescents with the formative activities and summative activities was a challenge. Teachers were not clear whether to teaching the affective attributes like life skills, values and attitude through the subject or separately.

However the fact that few teachers after the training had started using learner centered methods of discussion, maintaining a democratic classroom climate, use of laboratory and smart class was worth appreciating and if CCE would have continued these changes would have permeated to each and every teacher. Teaching the affective skills through the class is difficult but atleast many of the teachers had started planning it and though few implemented it , if CCE would have continued the changed might have become evident.

Overall the aim of CCE was pious and good but it could not be implemented properly due to lack of proper training related to each and every aspect of CCE. Lack of orientation about how and what to be done for enhancement of affective skills whether to integrate or not, how many FA activities to be conducted what type of activities to be conducted; how to observe different skills like scientific skills, literary skills, aesthetic skill and what type of activities was to be given in the club activities. The conceptual whole related to formative evaluation was missing in the understanding of teachers and students which has led to loss of the essence of the continuous and comprehensive evaluation (Bansal ,2014; Thakur,2016). CCE gave broad guidelines and left to the discretion of the school to decide and conducted the FA activities and assessments but the school system had lack of proper materials for implementation of CCE and there was lack clarity in the teachers about how to do the assessments, especially of the co-scholastic aspects (Sharma, 2014; Kothari and Thomas ,2012; Thakur,2016). In India, the school system has was always given directives and fixed structures from the respective boards, so utilizing the flexibility given was difficult for the teachers and the principals. However the intention of

CCE to reduce the burden of exams was seen only in 40 percent students as per the finding of the study. The De-emphasis of memorization and improvement in learning was perceived by only 29 and 15 percent parents. The overall enhancement was only in thinking skills and social skills and communication skills of the students while the stress of exams and de-emphasis of memorization was not achieved completely. Similarly it has been emphasized that more the number of assessment more was the stress in students (Bansal,2014; Srivastava ,2011). The very aim of formative assessment was defeated when the CBSE asked for having a structure of two formatives in a semester and producing the evidences for it and in turn not orienting the teachers about proper criteria based feedback to the students for improvement. Formative assessment was to be done as an integral part of teaching and learning process but the findings from different studies show that formative assessment was done at the end of each session as it was done for evidence production (Bansal,2014; Joshi , 2013; Sonawane and Isave,2012). Hence the whole energy and efforts of the teachers was spent in evidence collection, completing the total number of assessments and in turn the actual aim of formative to given feedback and give remediation to the weak students could not be done.

Though the new pattern of uniform system of assessment has started instead of CCE in CBSE schools since year 2017, the only difference is in the weightage given for formative assessment has been reduced from 40 percent to 20 percent, the inclusion of performance based activities which was emphasised more in CCE has now been reduced to 5 percent only. While CCE gave flexibility to the schools to take up any activity related to the subject as FA activity and utilise it to assess the students for 40 percent weightage while in uniform system of assessment activities to enhance the skills of the student are being fixed for each subject and the weightage has been reduced to five percent only. But the formative assessment and summative assessment still is done but in the annual system not in the semester system. Thus the students are assessed on 3 formative tests and in each formative test the cumulative syllabus taught till then is assessed unlike in CCE where student had to learn a content and didn't have to retain it for the next semester.

So if the CBSE would have worked on proper orientation and compulsory training of all the teachers(teachers teaching scholastic and co-scholastics) and principals, would have lessened the documentation, offered assistance for making the diagnostic tests and providing remedies and if a comprehensive test was also introduced at the end of each term then CCE would have become part of school system. The objectives given by CBSE for CCE were exactly as seen in NPE-1986, so after about 30 years a scheme was made to implement the evaluation system as given by NPE-1986. The CCE system also needed a change in the mindset of parents for reducing undue competition; changing the teachers mindset to teach for enhancing learning and not for evaluating the students; changing the mindset of the principals for promotion of all types of scholastic and co-scholastic activities and the students mindset to improve learning rather than memorising to score in the exam. The change in mindset cannot be brought in a small span of eight years for which the CCE was implemented. So an evaluation policy which was designed about 30 years back was materialised by CBSE in form of CCE and implemented and before it could bring changes in the school system it was discarded; just because CBSE itself did not ensure the availability of personnel for training and orienting the teachers and principals continuously and compulsorily and it also did not check the availability of different resources in the schools.

Thus through CCE, CBSE focused more on monitoring than on proper implementation. Rather than focusing on getting the documents and evidences it should have oriented and trained the teachers through compulsory training program. It should have provided a training program which would have practical aspects, demonstrations and interactions and guidelines for conducting and assessing co-scholastics. There was a dire need of a group of trained personnel who would know the main aim of CCE and would have trained the teachers, CBSE should have engaged in creating such personnel. 12.5 percent principals had said that it was challenging to make the parents understand the meaning and aim of CCE, CBSE should have focused on orienting the parents through some mean.

CBSE just monitored rather than mentoring. It made monitoring through centralized means of collection of evidences at the regional office of CBSE, but mentoring was done in a decentralized manner by an appointed mentor school in the city. The mentor school

mentored those schools which approached it. Every new system takes some time to establish itself. It has to be supported and nurtured, but CBSE could hardly do it. So ultimately focusing more on monitoring through collections of evidences of students' performances; the loopholes related to all aspects of CCE was neglected and hence the CCE could not continue.

5.11. Implications of the study

For the implementation of any new scheme of assessment or evaluation the teachers must be orientated about the main aim of it and then about the objectives and practice to be done in the classroom .

Teacher training should be compulsorily given by the board implementing the new system.

The training should be given by experts in the field of the same aspect.

Proper feedback should be ensured to all stake holders.

Rather than emphasizing on the number of events to be conducted under each session , quality of the events should be ensured.

Before the implementation of a new scheme of assessment the basic infrastructural facilities should be ensure by the respective board.

Details about the various tools, techniques alongwith uniform scoring pattern was needed.

5.12. Suggestions for further Research

An overall study on the implementation of other system of assessment by the different boards like IB board, IGSCE board can be conducted.

The implementation of new system of assessment i.e. the uniform system of assessment can be studied

There can be comparative study between the pros and cons of assessment patterns of different boards.

Case studies can be conducted for the schools following various kinds of assessments.