

Development of Continuous Comprehensive Evaluation (CCE) Program and Studying its Effectiveness**Dr. Surendra Chandrakant Herkal ,**

Principal, MIT Saint Dnyaneshawar B.Ed. College, Alandi (D), Pune

Background:

In Modern age evaluation process is the contribution of Psychology and Science of Education. Man's life is worthless without evaluation. Evaluation process starts from birth till death. Today evaluation is not only necessary in the field of education but also in every sector of our life. Before evaluating the work done in past the future work cannot be started.

Lord Mechaley minutes (1835) ⇒ Wood's Despatch (1854) ⇒ Hunter Commission(1882) ⇒ Indian University Commission(1902) Kolkatta University Commission(1919) Hartog Samiti(1929) ⇒ Abattoir Report (1937) Sargent Report University education commission(1948) ⇒ Secondary education commission(1952) ⇒ Kothari commission(1964) SABAC Samitee(1970) Narsingh Rao Samitee(1986) National Educational Policy(1986) Primary education curriculum(1988) ⇒ Dr. Dave Report Shrivastav Commission Report(1992) ⇒ Rammurti Samitee(1996) ⇒ NCP 2005 ⇒ RTE 2009 CCE 2010. This is the history of evaluation from 1835 to 2010.

A vast attitude should be developed about evaluation in constructivism. Learning output of every student is different, So objective for every student is different According to Jonassen (1996). ⇒ According to National curriculum 2005, ⇒ Improvement in examination is one of the important step in the process of reformation of syllabus. It is very important for the remedies on the mental stress of 10th & 12th Std. student and their parents. Our government has sanctioned the law in 2009 ⇒ by which students in between 6 to 14 age got the right of compulsory education from the year 2010-11 continuous comprehensive evaluation was implemented in schools for 1st to 8th std. According to the observation of 150 schools by VIMHANS 40% students were afraid of examination and they need guidance. Krishnkumar – (NCERT) said that

text books will be less in size and friendly with the children in future. The relationship between exam and textbook should be finish. K.B. Jinan a great educationist of Kerala said about educational system that he has started sensing nature, knowing nature workshop to study natural capacities among the students.

As per the evaluation related attitude it is observed that evaluation process at present is out of use. It cannot measure all competencies related to education. Researcher is related to education and teaching learning process from last 10 years. He has given ideal demo lessons for several times and observed lesson of teachers and student teachers. After analysis he found that continues comprehensive evaluation is not implemented properly. So he came to the conclusion that teachers must be aware about CCE.

Psychological Theory for Developing Research Program –

Research program developed by the researchers is the application of Jerome Bruner's cognitive learning theory. Students were evaluated by CCE for positive change in their behavior.

Need of Research –

- Present research is very much necessary for inspiring various aspects of intelligence of students and to motivate their innovativeness to create CCE method.
- The inefficiency of education is because of today's educational system. So to solve problems this research is necessary.
- There are more than 1 lac students who are out of school in the progressive state like Maharashtra. So this research will be very helpful to solve the problems of wastage and stagnation.

- This research is important to explain the usability, significance of CCE in new trends of evaluation.
- Teachers will get the handbook of CCE training program and they will be competent for effective implementation of CCE.
- This research will be helpful for the students and teachers to understand strength and weakness and for their overall development.

Title:

Development of Continuous Comprehensive Evaluation (CCE) Program and Studying Effectiveness

Statement of Problem:

Development of program for continuous comprehensive evaluation of Hindi subjects of 8th Std. and studying the effect of awareness on teachers and behavior of students.

Objective of the Research:

1. To study the present condition of CCE of Hindi subject of 8th Std.
2. To prepare handbook and programme for CCE evaluation system in Hindi subject for teacher of 8th Std.
3. To implement the program made for CCE of Hindi subject of std. 8th and to study its effect on awareness of teachers and behavior of the students.

Assumptions:

1. CCE is implemented on 1st to 8th Std. Primary education level. (G.R.N.: P.R.E./2010/136/10 P.E.-5)
2. Teachers face difficulties in implementation of CCE. (Pathak,S.2011,Rao,M. 2012, Kapoor, R. 2013, Chaple, D. 2013, Shelar, P. 2013, Bag, S. 2013.)
3. CCE gives motivation to the student's skills, Presentation and inbuilt Values. (Judal, M. 2011, Dev, P. 2011, Rao, P. 2012, Sing,Patel& Desai, 2013)

Hypothesis:

A. Research Hypothesis:

1. There is significant difference in median of pre-test and Post-test scores of teachers after implementation of CCE Program.

2. There is significant difference in the behavior of students in median of Pre & Post rating scale.

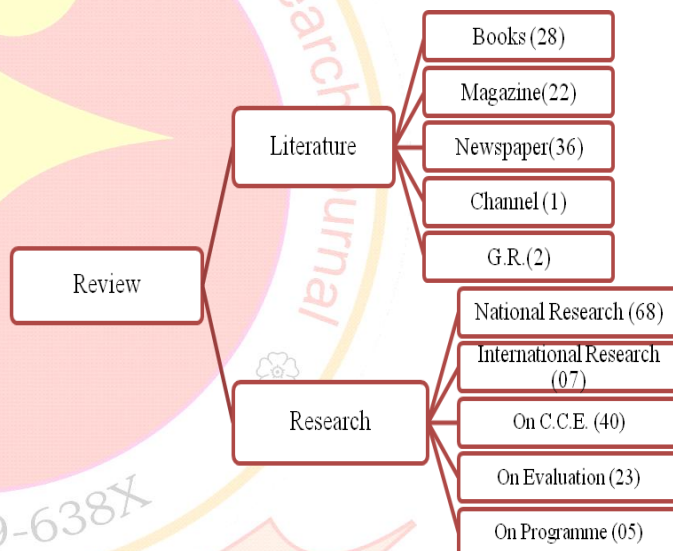
B. Null Hypothesis:

1. There is no significant difference in median of pre-test and Post-test scores of teachers after implementation of CCE Program.
2. There is no significant difference in the behavior of students in median of Pre & Post rating scale.

Research Question:

1. What are the difficulties in implementation of CCE to the teachers of 8th std. in Hindi subject?
2. What are the opinions of Hindi teachers of 8th std. regarding CCE ?

Review of Research & Related Literature:



Variable	Research
Study on Problems of Continuous Comprehensive Evaluation	Rao, R (1989), Bharathi, M. (1989), Jaybhaye, S.(2006), Jaiswal, S (2009), Naik, T. (2009), Shah, R.T (2011), Dev,P. (2011), Yagnik, B. (2012), Patil, P. (2012), Kapur, R. (2013), Desai, R. (2013), Jubilee P (2013), Garima B(2013), Shweta, S(2013), Patil, S (2013), Tom P.(2013), Nandini P. (2013), Prerana H.(2013), NAIDU, N.(2013), Bag, S (2013), Khadake, R. (2013), Belan, B. (2013), Thathe, M. (2013), Savant, D. (2013), Rathod, S. (2013), Hivare,

	R. (2013), Kamble, S. (2013), Kadam, V. (2013), Kokare, V. (2013)
Remedies on Continuous Comprehensive Evaluation	Gaikwad, N. (2008), Pandhare, V. (2010), Paathak, H. (2011), Jadal, M. (2011), Hambarde, M.M. (2011), Nagaraju, K (2013), Anil K (2013), VIJAYAN, K(2013), Genni S(2013), Kothari.R (2013), Angadi, G (2013), Torane, S. (2013), Davare, P (2013), Chaple, D. (2013)
Programme	Yewale, N. (2011), Rao, P. (2012), Bhagyalaxmi, V(2013),
Evaluation Tool	Thakare,v.(1991), Nawale,M.(1996), Sonawane, G. (2007), Gupta, C. (2008), Gawade, S. (2010), Payadhan, S. (2010), Chodhary, S. (2008), Taylor,H.(1966),Tewari, L.(1975),Tewari, C.(1982) Trivedi,J(1984), I.T.College, (1971), Sali,V.(1977), Varma, P.(1977), GCPT(1971), GCPI(1981), CIE(1962),

	mental	(14 %)	sive	e series	ness test	Lesson Observation
--	--------	--------	------	----------	-----------	--------------------

B. To see effectiveness of students change in behavior:

Obj.	Method	Sample	Sampling	Design	Tools	Techniques
03	Experimental	1616 (14%)	Purposive	Time series	Awareness test	t test

Validity and Reliability:

Tool	Reliability	Validity
Questionnaire	Split half (rtt: 0.89)	Checking from Experts, Content Validity
Program	Maturity, History, Statistical Undeveloped, Experimental, Experimenter's bias.	Interference before program, Artificialness, Effect of Interactive test, Interaction between selection and treatment.
Awareness test	Method of Rational equivalence r : 0.96	Difficulty value : 60
Lesson Observation technique(Certified)	Test – Retest Method r : 0.96	Concurrent Validity
Students Behavioral Rating scale (Certified)	Test – Retest Method	Concurrent Validity

15. Research Methodology:

Objective 01: To study the present condition of CCE of Hindi subject of 8th std.

Obj.	Method	Sample	Sampling	Resources	Tools	Evaluation
01	Survey method	232 (30%)	Stratified random	Teacher	1.Questionnaire 2.Discussion	1.Percent age 2.Chart

Objective 02: To prepare the handbook and programme for CCE evaluation system in Hindi subject for teacher of 8th std.

Obj.	Method	Theory	Development
02	Product	Behavioral	13 Steps

Objective 03: To implement the program made for CCE of Hindi subject of std. 8th and to study its effect on awareness of teachers and behavior of the students.

A. To see effectiveness of teacher's awareness:

Obj.	Method	Sample	Sampling	Design	Tools	Techniques
03	Experim	31	Purpo	Tim	Aware	t test

Research Variable:

Independent Variable: Continuous comprehensive evaluation program.
Process Duration: 05 Steps, 30 Hours

Dependent Variable: Teacher's achievement, change in behavior of the students

Control Variable: Period of Program, Resource Person, Medium, Teacher and Students

Population:

All teachers teaching Hindi Subject to std. 8th from secondary school of Maharashtra and all students learning in 8th std.

Tools of Data collection:

A. Survey Method: (Objective 01)

1. Questionnaire for Teachers: Questionnaire was filled from 232 teachers to check the present condition of CCE.

Section	Particular	Question number
01	Primary Information	12
02	CCE – Teacher Preparation	18
03	Obstacles in implementation of CCE	15
04	Instructions for improvement in Implementation of CCE	07
	Total	52

2. Focus Group Discussion: Focus group discussion was done by 52 teachers to know difficulty and obstacles in CCE.

B. Product development Method: (Objective 02)

1. Program for CCE: Program was created by 13 stages of development. It was implemented through 5 stages on 31 teachers.

Section	Steps	Period	Percentage
01	Awareness	12	38.70 %
02	Preparation	10	32.25 %
03	Implementation	04	12.90 %
04	Obstacles	03	9.67 %
05	Suggestion	02	6.45 %
	Total	31	100 %

2. Resources of CCE training program:

- Teaching experiences
- Teacher Handbooks
- Video clips – A. CCE-Directions & challenges
B. My School
- Exhibition
- Guidance of experts.
- Use of software's
- Question free exams.
- Creation of lesson notes
- Ideal school

3. Interviews: Researcher has collected information from 18 persons of various sectors to get training and information expected for effective implementation of CCE.

C. Experimental Method: (Objective 03)

1. Awareness test: 31 teachers who participated in the program of CCE were evaluated through

awareness tests. This evaluation is done before and after 3 months of the program and after three months for 3 times with the help of time series design.

Sr. No.	Section	Particular	Marks
01	First	Background of CCE	05
02	Second	Awareness of CCE	16
03	Third	Tools of CCE	09
04	Forth	Difficulty of CCE	10

2. Lesson Observation Techniques: This technique is use by the researcher for observing the method of teaching used by the teacher for Hindi subject and the actual use of CCE.

Observation	Observations	Observer	Period	Tools	Teachers
Program (Pre)	6	1. Principal or Vice – Principal 2. Researcher	3 Months	Observation Technique	31
Program (Post)	6	1. Principal or Vice – Principal 2. Researcher	3 Months	Observation Technique	31

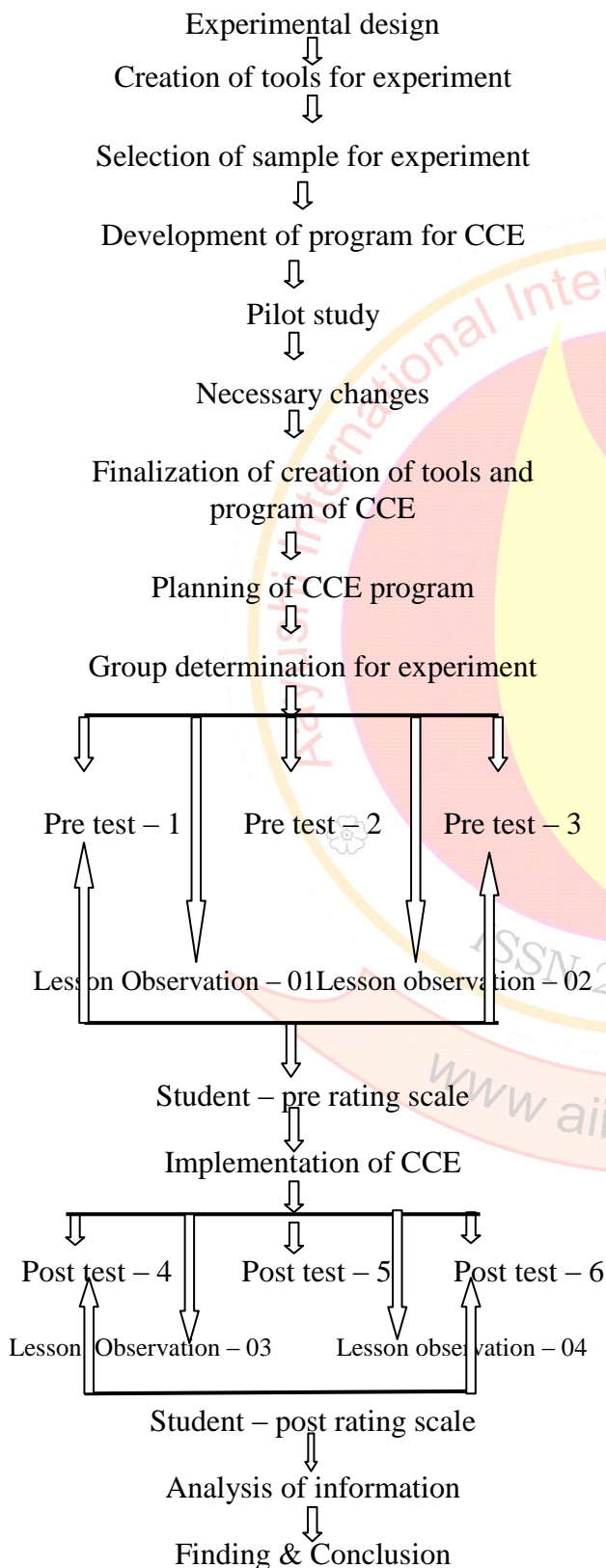
3. Rating scale for change in behavior of students:

The change in behavior of students due to implementation of CCE is observed by rating scale in 7 factors. The validity and reliability of the rating scale is being checked and after necessary changes it was used for implementation of research.

Observation	Rating	Observer	Period	Tools	Teachers	Students
Program (Pre)	3	Teachers	3 Months	Rating scale (Certified)	31	1616
Program (Post)	3	Teachers	3 Months	Rating scale (Certified)	31	1616

Statistical Tools: Researcher has used percentage, Line graph, bar graph, circular, diagrams, median, S.D., Correlation, t value etc. statistical tools for research.

Chart of implementation of experiment in descending order:



Testing of Hypothesis:

Research Hypothesis 01:

Diff. in M	r	S.D.	T test	T table value	Decision
13.32	0.32	1.06	12.56	2.75	Null Hypothesis – Not accepted

After implementation of CCE program it was found that there is significant difference in the scores of pre and post test of teacher awareness.

Research Hypothesis 02:

School	Diff. in M	S.D.	T test	T table value	Decision
Lower behavior scale of change	1.08	0.56	3.16	2.021	Null Hypothesis – Not accepted
Higher behavior scale of change	10.85	0.68	15.85	2.002	Null Hypothesis – Not accepted

After implementation of CCE program it was found that there is significant difference in the scores of pre and post rating scales used for evaluating behavior of students.

Main Finding:

Findings according to objective no. 01: To study the present condition of CCE for Hindi subject of 8th Std.

Section	Questionnaire	Group Discussion
General information	1.60% teachers teach for std. 8 th to 10 th . 2.35.77 % teachers did not take CCE implementation.	1. Some teachers evaluate std. 8 through traditional method. 2. According to some teachers training was not effective.
Preparation of teachers	1.67.11% teachers did not take CCE implementation training. 2.51% teachers have made some change in their teaching for CCE.	1. Half of the teachers don't know the clear implementation of CCE. 2. Some teachers have done changes in their teaching.
Difficulties	1.91.37% teachers face difficulties while doing formative evaluation. 80.60% teachers thought that quantity of students in the biggest obstacle in CCE.	1. Most of the teachers face difficulties while doing formative evaluation. 2. Most of the teachers think that quantity of students in the biggest obstacle in CCE

Opinion	1. According to 92.09% teachers negligence towards study and scale of indiscipline is increased due to CCE. 2.68.53% teachers have opposed the implementation of CCE.	1. As per opinion of most of the teachers scale of indiscipline is increased in students. 2. Most of the teachers have opposed implementation of CCE.
----------------	---	---

Findings according to objective no. 02: To prepare handbook and program for CCE evaluation system in Hindi subject for teachers of 8th Std.

NO.	Stage	Objective	Unit / Sub-unit	Resources/ Tools	Procedure	Theory
01	Awareness	To understand the historical background of CCE	1. Review of evaluation from 1882-2010.	Researcher Questionnaire	Representation in front of group Observation Discussion work	Thorndike's theory of connectionism.
		To present need & purpose of CCE	1. Need of CCE. 2. Purpose of CCE	Researcher	Representation in front of the group	
		To explain objective of CCE	Objective of CCE	Researcher	Group discussion.	
		To tell need & importance of CCE.	Importance of CCE & Need of CCE	Researcher	Representation in front of the group	
		To explain the reasons of implementation of RTE 2009	Implementation of RTE 2009 RTE-2009 Need of Roles.	Expert	Question-Answer	
		To develop positive attitude regarding CCE.	Introduction of main aspects of CCE.	Researcher	Group discussion.	
2	Preparation	Revision of CCE handbooks	1. Handbook. Part 1: Revision 2. Part 2: Revision 3. Part 3: Revision	Researcher	Group Presentation. Group Presentation.	Pavlov's classical conditioning theory
		Introduction of new evaluation techniques for Hindi Subject.	1. Self evaluation 2. Rubric 3. Test with books 4. Project 5. Activities	Researcher	Group Presentation.	
		Development of result sheet & Charts of Formative & Summative evaluation	1. Necessity of formative evaluation. 2. Necessity of summative evaluation 3. Information of CBSC software.	Researcher	Personal experience Presentation & work.	Classification of Bloom's Taxonomy
		To explain teacher's role in procurement & expected achievement by the students.	1. Supplementary guidance. 2. Necessary instructions. 3. Follow up 4. Procurement	Researcher	Discussion	
		To develop questioning skill of the teachers.	1. Based on objective A. Knowledge based question. B. Comprehension based	Researcher	Activity	

			<p>questions.</p> <p>C. Application based question.</p> <p>D. Skill</p> <p>E. Interest</p> <p>2. Based on Size</p> <p>A. Objective</p> <p>B. Short answer</p> <p>C. Long answer</p> <p>3. Based on Types</p> <p>A. Free questions</p> <p>B. Closed questions</p>	<p>Researcher</p> <p>Researcher</p> <p>Researcher</p>	<p>Group work</p> <p>Creation of questions workshop</p> <p>Discussion of experiences</p>	
		To give information of question free exam to the students.	<p>1.Objective of question free exam.</p> <p>2.Nature of question free exam.</p> <p>3. Implementation</p>	Researcher	<p>Presentation</p> <p>Discussion</p>	Constructivism
3	Implementation	To help the researcher to include the constructivism process and CCE	Inclusion of construction learning teaching evaluation.	Expert	Discussion	Master learning theory
		Presentation of Hindi lessons by using software	Learning – teaching process	Expert	Observation and Handling	
		To implement the CCE for Hindi Subject.	<p>1.Actual lesson and formative evaluation.</p> <p>2.Actual lesson & Simulative evaluation</p> <p>3.Lesson by teachers</p>	Researcher	<p>Work</p> <p>Activity</p> <p>Actual lesson</p>	
4	Obstacles	To remove obstacles in implementation of CCE.	<p>1.To understand the obstacles in implementation of CCE.</p> <p>A. Quantity of CCE.</p> <p>B. Time</p> <p>2.Classification of obstacles in between CCE.</p> <p>3.To make competitive to face obstacles.</p>	<p>Researcher</p> <p>Apanch Institute</p>	<p>Record</p> <p>Discussion</p> <p>To do observation</p>	Skinner’s classical conditioning theory
		To insist the teacher for effective implementation of CCE.	<p>1.Motivation</p> <p>2.Role</p> <p>3. Blue print of formative evaluation.</p>	My School C.D.	Discussion	Thorndike’s connectionism theory
	To give extra instruction for effective implementation	<p>1.Special instruction for formative evaluation.</p> <p>2. Special instruction for summative evaluation.</p>	Researcher	Representation		

Objective 2 was fulfilled by creation of effective program.

B. Preparation of Handbook:

1. Purpose was fixed to prepare teacher handbooks.
2. Units form handbook was fixed.

A. Review of evaluation in the period 1882 to 2010.

B. Evaluation method in the present situation.

C. Need and purpose of CCE.

D. Need and Importance of CCE.

E. Implementation of RTE 2009.

F. Self evaluation, Rubric, Test with books, project, Activity.

G. Need of record for formative and summative evaluation.

H. Information and handling of software.

- I. Supplementary guidance
- J. Types of question.
- K. Constructivism process
- L. Association of learning – teaching – evaluation
- M. To understand the obstacles in implementation of CCE.
- N. Motivation
- O. Special instructions for formative and summative evaluation.

C. Comparison in between govt. made teachers handbooks and researcher made teacher handbook:

Point	Govt. made teacher handbook	Researcher made teacher handbook
Scope	All subject	Hindi Subject
Background	Brief	Historical and theoretical both clear
Act 2009	Just mention	Clarification between concept of evaluation from act 2009 and CCE.
Constructivism	Constructivist teacher – No Act.	1. Constructivist teacher – Clear act 2. Difference between traditional evaluation & Constructivist evaluation. 3. Association of constructivist teaching and CCE. 4. Preparation of evaluation A. Learning through observation B. Learning through curiosity C. Problem solving.
Formative	Layout of formative tools	Layout of formative tools- 8 Tools
Evaluation Tools	1. Concept 2. Purpose 3. Method of work 4. Criteria for scoring	1. Preparation 2. Merit 3. Limitation 4. Example 5. Practice 6. Other tools : A. Self Evaluation B. Rubric
Evaluation Collection Tools	Representation of evaluation collection tools : 1. Purpose 2. Structure	Evaluation Collection Tools 1. Written Exam. 2. Question free exam. 3. Evaluation process.
Extra Guidance	Presentation : 1. Invention 2. Reasons 3. Remedies	Representation: 1. Purpose 2. Diagnostic 3. Invention 4. Reasons 5. Preventive remedies 6. Remedial teaching.
Question	Various types of sample	Sample question papers of various types : Sample

	question : Questions as per std.	question papers of Hindi subject (Recitation skill, Written Skill, Grammar Skill, Point wise) Oral, Written : Level 1,2 & 3.
Ideal lessons		Std. Eight – Unit 3 all lesson constructivist teaching method, 5 E model, 7 E Model.
Monthly planning		Monthly Planning – sample Month - December
Blue print for objective fulfillment		Blue print fro objective fulfillment : Content Analysis. 1. Objective 2. Scope 3. Learning – Teaching, 4. Lesson 5. Teaching methodology 6. Teaching aids 7. Evaluation tools 8. Evaluation direction 9. Time
Ideal School		Jawahar Navodaya Vidyalaya, Wynad, Dnyanprabodhini, Pune
Motivation		My School : Serial – C.D.
Ice-Breaking Prog.		1. While being motivation teacher 2. Introduction of learning evaluation 3. Introduction of Modern teaching pedagogy. 4. Introduction of project work
Exhibition		CCE- Challenges and Direction
Software		Sample software for recoding score
Blue print for activity		Remedies were suggested for the difficulties seen in research.
Suggestions		Guidelines for effective implementation
Principles		Code for Quality education.

Findings according to objective no. 03: To implement the program made for CCE of Hindi subject of std. 8th and to study its effect on awareness of teachers and behaviors of the students.

1. The achievement of the scores regarding awareness of the CCE of teachers after implementation of CCE program was increased, Hence the program was fruitful.
2. There was significant change in the median of pre and post test scores for behavioral change of

students, Hence the implementation of CCE was fruitful.

3. After analyzing the responses given by teachers it was found that problem of teachers and students were decreased a lot.

Majors findings:

1. Most of the teachers find problems in formative evaluation, Population of the students, discipline etc. *(Objective 01)*

2. Most of the teachers use traditional method for teaching and evaluation. *(Objective 01)*

3. The scientific blue print was developed with the help of following activities for CCE. A. Awareness B. Formative tools C. Collective tools D. Constructivist teaching E. Questioning skill F. Ice – breaking activities G. Records of software H. Guiding instructions *(Objective 02)*

4. There was positive significant change in teachers’ awareness and students’ behavioral change after the implementation of CCE. *(Objective 03)*

Suggestions:

1. Headmasters should guide the teachers regarding CCE and they must take feedback of implementation of CCE after every week for all subjects in there schools.

2. Teachers should accept CCE and use information booklet and CD for getting information. They should do action research to solve difficulties in CCE.

Discussion:

The research done by Rao R.S. and Bharati (1989) regarding CCE of Hindi subject didn’t get much success but the research done by the researcher regarding CCE of Hindi subject was most successful. In the research done by Gupta C.V. (2008) it was suggested that the overall development took place through education so this overall development was much necessary. But in present research CCE was implemented for overall development of students and its usability was explained through the medium of program. In the research of Pathak, Hemant S. (2011) he has studied difficulties faced by teachers in CCE process and suggested remedies for it. In the present research, researcher has used those remedies for making the program and studied its effectiveness.

Kapoor, Rekharani (2013) has suggested remedies for teachers to solve difficulties in project, In present research researcher has solved those difficulties through effective implementation. In the research done by Rao, Manuta P and Rao P.T.(2012) the finding was teacher’s knowledge was increased because of the training of CCE and they have inculcated new skills of evaluation for evaluating the achievement of students. But in the present research researcher has studied the change in behaviors of students for CCE also.

Knowledge and educational Contribution of the research:

Researcher has developed awareness regarding CCE among teachers of secondary school through the present research. With the help of this research students will be evaluated properly and there will be positive change in their behavior for overall development. From this point of view this is the knowledgeable contribution of the research.

References:

- 1) Bloom, Benjamin. S.(1975). *Evaluation, Instruction and Policy making–IIEP Seminar Paper*. Paris; International Institute for Educational Planning, UNESCO.
- 2) Best, J. W. & Kahn, J. W. (2011). *Research in Education*. (10th ed.), New Delhi; PHI learning Private limited.
- 3) Bloom, Benjamin., Hastings, J.T. & Madaus, G.F.(1971), *Handbook of Formative and Summative Evaluation of Student learning*. US: Donnelley & Sons Company.
- 4) Faure, E., Herrera,F., Kaddoura,A., Lopes, H., Petrovsky,A., Rahnama,M. & Ward,F. (1973) *Learning to be*. (second edition), New Delhi; Sterling Publishers ltd.
- 5) Garrett, H. E. (2006). *Statistics in psychology and Education*. Delhi; Surjeet Publications. Kothari, C. R. (2010). *Research Methodology- Methods and Techniques*. (second revised edition), New Delhi; New Age International Publishers.
- 6) Lewy, A., Nevo D. (1981). *Evaluation Roles in Education*. New York; Science Publications. Mouly, G.J. (1970). *The Science of Educational Research*. New York; Van Nostrand Reinhold Compl.
- 7) Rossi, P. H., Freeman, H.E. & Lipsey, M.W. (1979). *Evaluation – A Systematic Approach*. (Sixth Edition), New Delhi; SAGE Publications.