

Reflections on School Based Evaluation: Policy Perspectives and Researches

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ABSTRACT

Evaluation is an important part of school curriculum, which aims at giving feedback to the students for improving their performance. However, there have been changes in the curriculum from time to time, this implies a parallel modification in the evaluation practices also. In India, there have been recommendations given by various educational commissions and committees, for reforming evaluation or examination patterns. The implementation of these reforms should be supported by research studies, so that the advantages and drawbacks of these reforms can be found at a small scale on experimental basis and then the strategies for removing the drawbacks are made, such that the effective implementation of the reforms can be done on the large scale. So, it is important to find out the role of research studies in implementation of exam reforms as given by various educational committees and commissions at different time periods and the lacking points therein. However, critical review of the research studies in the light of the recommendations given by the educational commissions at different time periods would not only help in finding out the good practices and loopholes in the studies during that period but will also help in developing the insight for future reforms. This paper is a humble effort to reflect on the research findings from the researches mentioned in the educational surveys, on school based evaluation in comparison with the recommendations given by educational commissions and committees like Secondary Education Commission (1952-53), Education Commission (1963-64), National Policy on Education (1986), Plan Of Action (1992), National curriculum Framework (2000) and National Curriculum Framework (2005) for exam reforms and evaluation practices.

Keywords: Exam reforms, evaluation, school based evaluation

Education is the training of the mind and assimilation of ideas leading to dynamism of character and creativity of personality. Though Education occurs formally and informally, school education plays a vital role in training of the mind and shaping of the character and personality. However, school does this with a well-planned curriculum consisting of curricular and co-curricular activities along with their assessment. Examinations play a crucial role in assessment of these activities, especially in the secondary schools. The school systems specifically draws its objectives from the needs of the society hence timely there has been several changes in the school curriculum and hence there has been implied changes in the examination or the

evaluation procedures. In the Indian context the changes in curriculum and evaluation practices are suggested by the policy documents and are based on the recommendations of different educational commissions and committees. Researches also play a vital role in bringing about different reforms in school system.

One such reform in school system was introduction of Continuous and Comprehensive Evaluation (CCE) in the year 2000 by CBSE. CCE aimed at assessment of students' behavior related to scholastic aspects along with desirable behavior related to co-scholastic aspects like life skills, attitudes, values, co-curricular and physical health activities. This aim of CCE was in accordance

with the objectives of secondary education set by the various educational commissions. CCE also emphasizes on development of values and personality as mentioned by secondary education commission (1952-53). CCE also laid emphasis on development of proper interests, attitudes and values and the building up of essential skills like independent study, capacity to think and judge for oneself in the secondary school students like the education commission (1964-66).

Similarly, the aims of CCE had an alignment with National Curriculum Framework for School Education (NCFSE, 2000) which focused on developing life skills, such as problem-solving, critical thinking, communication, self-awareness, coping with stress, decision-making, creative and generative thinking, interpersonal relationships and empathy through activities suiting the culture of the society.

However, the CCE was started with the intention to work on the principle of School based evaluation, which was voiced by NPE 1986 and the CABE 1992 such that the student at the end of the secondary school examination has the total record of the Scholastic subjects and the co-scholastic achievements or enhancement that he/she had.

Researches also indicated the need for a system of evaluation which encompassed the all round development of the secondary school children. However, the signals given by the research findings for the reforms in examination system, over the year have been in slow and indirect, hence it took so many years for framing the system of CCE which was described long back by the education commission as the School based evaluation. Any reform becomes faster when the recommendations from learned committees are supported with the research findings in the respective field.

Hence, reflecting on the association that the various recommendations had with the researches that were conducted during the respective time period will help in understanding why the implementation of School Based Evaluation was delayed though it was suggested long back. This paper is a humble effort to reflect on the relationship between the suggestions given by various committees and commissions on exam reforms and the researchers in the field of educational evaluation and examination on the respective timeline.

Trend in Researches in Educational Evaluation and Examination (1945 to 1972)

The period between 1945 till 1972 was the period when the secondary education commission (1952-53) and the education commission (1964-66) gave their important recommendations on the examination reforms. The secondary education commission highlighted points like introduction of better type of objective questions to minimize the use of essay-type questions, maintenance of proper school records for every pupil that would determine his all round development in different spheres, giving due credit to the internal tests, use of symbolic system for evaluating the internal and external examination of the students, conduction of only one public examination at the end of secondary school, and the report card of the public examination should include gist of school records and results of external exams both.

The education commission (1964-66) suggested that internal evaluation should be done in descriptive terms especially the personality traits, interests and attitudes of the students using different tools and techniques like observation, oral tests and practical exams. It also suggested the use of standardised tools for internal assessment and a dire need for development of interest inventories, aptitude tests, rating scale by experts. It also emphasised on training teachers to make such simple tools. It was also recommended that the results of internal and external exams should not to be combined, if the standardised tools are not used for internal evaluation.

Both the commissions focused more on internal assessment, especially on the assessment of personality traits, interests and attitudes of the students. Hence it was imperative that the researchers during this period should have focused on making of such tools of evaluation which would help the teachers in doing the internal evaluation of the personality traits but the studies show that studies focused on making & standardizing achievement tests for chemistry, physics and home science for grades IX to XI (Mehta, 1966 & SIE Gujarat, 1969; Sinha, 1971; Ammal, 1972), making of university entrance test, physical education test, medical fitness test and career guidance test (Lele & Bagatwala, 1954; Shukla, 1957; Mascarenhas, 1964;

Liddle, 1965), making of diagnostic test for language (Mehta, 1966 & SIE Gujarat, 1969). Studies were also made to find defects with respect to the difficulty level of questions in terms of content coverage and weightage given and the marking were also were not precise (Malhotras, 1972; Taylor, 1963). Also studies revealed that there was a positive correlation between internal and external assessments but it varied from school to school (Deshpande, 1972). It was also revealed that teachers qualifications, teaching methods, conditions, location of schools, teacher transfers, equipment, buildings, clerical work done by teachers, pupils' previous attainment, pupils' attendance, media of instructions and examinations played a major role in failure of the students in the secondary classes (GCPI, 1981; DEPSE, NCERT, 1964).

Thus the authors would like to reflect that if the researches were done to design objective type of tests with different difficulty level, making standardized inventories and tools for evaluating the personality traits, attitude and interest of the students in secondary classes; it would have been of great help to the teachers for internal evaluation. The difference in correlation between internal and external assessment was studied but a description of reasons for the differential correlation would have helped in giving a feedback to the different type of schools to improve their internal assessment. Teacher's qualification, teaching methods, media of instruction and examination was highlighted to have an impact on the failure of the students, but how this impact could be reduced would have helped the teachers to improve in their teaching methods and evaluation practices.

Trend in Researches in Educational Evaluation and Examination (1975 to 1982)

Considering the importance placed on the examinations by university education commission (1948) and secondary education commission (1952) and emphasis laid by the education commission (1964-66) to prepare special units for examination and evaluation at UGC headquarters, UGC made a document entitled Examination Reforms. The document focused on the taking continuous examinations rather than a single annual exam, development of question bank to eliminate the shortcomings of setting exam papers, introduction

of grading system and introduction of semester system. During this time period, National Council of Educational Research and Training (NCERT) was established in 1961 for qualitative improvement in school education. In alignment with the UGC's examination reforms document, NCERT focused its attention on research in examination system at the school stage and focused on development of materials and operational strategies, training at both pre-service and in-service level for teachers, publications, collaborating with state boards, SIET, SCERTs for conducting the researches and implementing various innovative programs in the examination system at the school stage.

It was during this period (1975-82) that the third survey of educational research was conducted. The points highlighted in the document on examination reforms by UGC, were on making the question bank and to make the exams continuous. This implies that there should have been focus on making various types of question for the question banks and there should have been a focused research on the tools and techniques to be used for formative assessment if the continuous assessment had to be done. However the researches focused on making achievement tests for finding the numerical ability, vocabulary, mathematical reasoning, analogy, comprehension, sentence completion for secondary school students (Liddle, 1965; De, 1979); Oral reading comprehension in English for grade VIII students (Skariah, 1981); written language abilities, comprehension, sound discrimination, articulation, listening skills and reading abilities in the languages like Hindi, Gujarati and Kannada and standardizing those tests (Shiva Nanda, 1981; Modi, 1975; Patel, 1978; Desai, 1974; Verma, 1977).

Achievement tests were made for algebra and geometry of grade VIII and grade IX and were standardized, test made for grade IX was correlated to the Guilford's Structure of Intellect Model and showed positive correlation (Chauhan, 1982; Ketkar, 1982). Achievement tests were also made for physics for grade VIII to X (Chhaya, 1978; Khandelwale, 1981); home science of secondary class students and were standardized (Kapoor, 1968; Garg, 1969) and physical education test named Rangachar Satyamurthy Selection Battery (RSSB) was made for testing the physical quotient and helping the students to select different type of curricula respectively (Shukla, 1957; Satyamurty, 1965).

The main reform suggested by the document on exam reforms by UGC was about the continuity of the exams, when the exams have to be continuous it would help in for giving proper feedback to the students for their improvement. One of the ways to give pin pointed feedback is also to do diagnosis of the learning difficulties. In the third survey, there were some researches on diagnosis of the learning difficulties. Diagnostic tests were made for grades III and grade VI schools of Uttar Pradesh, Haryana, Kerala and Gujarat for language but it did not test language skills like listening, speaking, reading and writing (Sinha, 1971; Ammal, 1972; SIE-Gujarat, 1969). Low achievement of the Indian students in the Mathematics test was attributed to the lack of quality instruction, improper testing and lack of proper diagnosis and remedial practices.

The continuity of exams may also require internal exams to be conducted in the schools. There were few researches which focused on the internal assessment. It was found that liberal internal marks increased the final percentage of the final result of the students (Venkubhai, 1965; Rasool *et al.*, 1981; Nath 1980); due to the hike in internal marks the students get good marks in theory than practicals (Sali and Umathe, 1979) so it was also said that the internal assessment suffered from the halo effect and errors due to central tendency which was a blessing for the students (Rasool, Sarup & Sharma, 1981).

The researches focused on making achievement tests and diagnostic tests for three subjects of English, Science and Mathematics, but the authors feel that research studies to integrate these questions and make a question bank for different subjects would have helped in increasing the utility of the questions. However there was one study which tried to validate Bloom's taxonomy of educational objectives by analyzing the product and process oriented approaches found in the questions related to synthesis and analysis in a question bank. It was found that, questions related to synthesis were misplaced and the questions related to analysis were misleading in a question bank different secondary school teachers (Singh, 1978). Such findings will refrain teachers from using the question banks. Hence a focused effort to make question banks, by the researchers, for wider usage in all the parts of the country was lacking in the research studies conducted. The authors strongly feel that since the

focus of the recommendations of the examination reform document set out by UGC during the period of 1975-82, was to make the examination continuous and to improve the shortcomings of the question papers it would have been better if the researches would have focused on how to make the different type of questions to be made for formative and summative assessments which cater to different levels of cognitive development. There were studies which highlighted the effect of including the scores of internal examination and external exam in the final result, but there was no consensus in the findings whether the inclusion of internal assessment marks were effective in displaying the continuity of the assessment or it was ineffective. In some places the inclusion of internal marks inflated the students' marks unexpectedly and in some places it gave the right picture of the students achievement. The emphasis during this duration from 1975-83 was on introduction of semester system and grading system, the researches should have focused on the various grading patterns that could be introduced in the schools system and the strategies and planning required for implementation of semester system, but no such research studies were found.

Trend in Researches in Educational Evaluation and Examination (1983 to 1988)

During this period (1983-88) the National Policy for Education (NPE, 1986) was proposed. The policy document emphasized on elimination of excessive element of chance and subjectivity, de-emphasis of memorization, continuous and comprehensive evaluation that incorporates both scholastic and non- scholastic aspects of education, spread over the total span of instructional time, effective use of the evaluation process by teachers, students and parents, improvement in the conduct of examination, introduction of concomitant changes in instructional materials and methodology, introduction of semester system in the schools and use of grades in place of marks.

The studies during this period were not much related to the needs highlighted in the policy document of NPE 1986. There was one of the studies mentioned in the educational survey which reflected the views of the people regarding the internal assessment, the findings show that majority of the respondents were in the favor of introducing the

internal assessment and wanted the addition of the internal and the external marks in the final results (Kushwaha, 1985). While the study on the attitude of the students and teachers and guardians on the system of examination revealed that students, teachers, guardians were dissatisfied with the system of examination where there was only one final exams without any internal exams (Sinha, 1977). The authors feel that the studies should have focused on how to evaluate the non scholastic aspects, so that a comprehensive evaluation could be done. Rather than that the studies just focused on the attitude of the teachers, guardians and students on the conducting internal examinations. There was also no focus on the grading system to be introduced and the type of instructional materials and the change in methodology to be done for introducing the continuous and comprehensive evaluation in the schools.

Trend in Researches in Educational Evaluation and Examination (1988 to 1992)

The period from 1988 to 1992, much was being discussed to implement the points mentioned for examinations reforms described in the NPE 1986. In the same period the fifth educational survey was conducted in which there were few studies related to examination and assessment which supported the points of Exam reforms given in NPE1986. Elimination of excessive element of chance and subjectivity, effective use of the evaluation process by teachers and improvement in the conduct of the examination was mentioned in the NPE 1986, reduction of the subjectivity can be done if criterion reference tests can be made and that would also help the teachers to know if the objectives of teaching a topic has been achieved or not.

This feedback to the teachers and the reduction in subjectivity would help in improvement of the examinations. There were three research studies found in the fifth educational survey, in which the criterion reference tests (CRT) were made. These tests were made for environmental studies, Sanskrit language and social studies (Singh, 1988; Raithaththa, 1989; Vaghela, 1992). Only one test made for environment studies the content validity was checked and parallel form of reliability was checked while the remaining two tests described the knowledge that would be measured but it was

not checked for its reliability or validity. However the three tests were simplified versions of CRTs that would inform the teachers and students what would be tested and how it would be tested and thus would improve the teacher's instruction. There was also a research study which showed the steps involved in designing the multiple choice items for reading comprehension (Chawla, 1988). This would also have helped the teachers to design the MCQs so that the subjective questions can be reduced, but there was no such effort done by the researchers for other subjects and moreover there is no mention in the research about the utilization of the designing technique for MCQs by the teachers in the school.

Another point highlighted for exam reforms by NPE1986 was to evaluate non-scholastic aspects of child's development. The non-scholastic aspects may include the evaluation of attitude and interest towards different subjects, aptitude for the subject and the personality attributes that the student exhibits. In one of the researches, described in the fifth survey, it was found that a battery of scientific aptitude tests for class XI students was made to find out their scientific awareness, numerical ability, perceptual ability, spatial ability and figure dexterity of Jammu city, though the test was useful it was not standardized (Sharma, 1991).

Similarly a battery of test of creative thinking for Urdu speaking students was developed and standardized which had non verbal tests like picture completion test, incomplete test, figure repeat activity, consequences, novel uses, similarities, product improvement and study title for grade VIII, IX and X students, but the coefficient of reliability and validity was not defined hence the occurrence of standardization process was doubtful (Siddiqui, 1988). A tool was made to find out the academic alienation scale in terms of social desirability, but the term social desirability has been loosely defined (Chauhan, 1988). The self concept inventory (SCI) also did not measure the social desirability in class IX and X students since the respondents marks on all the adjective check list he/she considers to be description of himself / herself are to be rated in terms of appropriateness of description, so the response may be respondents pre-disposition to make a socially desirable impression of his/her personality and also the self concept was not defined by the author (Shah, 1989). Though the above four

studies have developed scales and procedures for non-scholastic assessment they do not measure a broad range of student behavior. Besides this the tools are made on the faulty conceptualization or improper operationalisation of the psychological terms thus the results of the tests would have scanty chances to estimate the psychological aspects of adolescent students. There was an effort of evaluation of the continuous evaluation system of examination of Kendriya Vidyalayas to find its effectiveness on final performance in grade IX using school records of five subjects, but the study showed no proper scaling of the students achievement (Rao and Bharathi, 1989). Though the process of teaching learning was not much focused by researches but there was a focus on the content analysis of the questions appearing in the secondary school examination, which showed that lack of specified weightage for a particular content led to ambiguity in questions with respect to different level of cognitive abilities namely comprehension and application (Malhotra, Beedi and Tulsi, 1990).

However the status study of internal examination also revealed that schema of monitoring students' progress, use of feedback system for teachers and students and curriculum planners were not appropriate (Malhotra, Beedi and Tulsi, 1989). A comparison of grading system and marking system by analysis of answer books of teacher trainees showed that marking was as reliable as grading system (Kumar,1991).

The CRTs were made to improve the examination and to gather feedback for the improvement of instructions/ teaching methods, but the tests were made for only three subjects. Authors feel it would have been better if such tests were made for all the subjects by the researchers. Research study shows the design for the designing of MCQs which should definitely reduce the subjectivity and increase the objectivity of the test, but if the utility of the design by the teachers at school would have been found then it would have helped the other teachers also to utilize the same design to make MCQs. The researches in the survey show that there were few test made for the assessment of the non scholastic aspects, but most of the tools were not standardized, so the results of the tests might be improper. So the authors feel that tools for assessing the non scholastic achievement should be standardized

to get reliable results. Moreover the authors are of the opinion that researches should also find the impact of the non scholastic aspects on the scholastic aspects, so that the teachers can plan the proper integration of non-scholastic aspects with the scholastic aspects during the teaching learning process. The authors also feel that since all the scholastic and non- scholastic aspects cannot be quantified, researches should also focus on the qualitative assessment of scholastic and non-scholastic aspects, so that the process of learning along with the product of learning is evaluated.

The authors support the use of specific weightage to the questions measuring different cognitive abilities like comprehension and application level. A blue print can be made by the school subject wise for making both formative assessment question papers and summative assessment question papers. As the findings of the researches suggest that schema of monitoring students progress, use of feedback system for teachers and students and curriculum planners were not appropriate, authors would like to suggest that an orientation on the feedback mechanism and purpose of feedback should be given to the teachers every year and an outline/semi-structured framework for curriculum planning should be provided so that the teachers can develop the planner properly. The authors also feel that the teachers should be oriented during the Teacher training and the in-service training about the various ways and means to track the students' progress.

Trend in Researches in Educational Evaluation and Examination (1993 to 2000)

During this period not much was being done for reforming examinations. The main focus was to achieve the goals set by NPE 1986 and to follow the corrections mentioned by POA1992. However in the POA just the goals set by NPE 1986 was being discussed and was tried to be implemented. Though much was done as per the goals set by NPE 1986 in the field of curriculum, the three language formula and even the structure of examination was changed to 10+2+3, still not much attention was given to the goals set for examination reforms. However the POA1992 again re-emphasized the same points on examination reforms like elimination of excessive element of chance and subjectivity, de-emphasis

of memorization, introduction of continuous and comprehensive evaluation that incorporates both scholastic and non-scholastic aspects of education, effective use of the evaluation process by teachers, students and parents, improvement in the conduct of examination, introduction of concomitant changes in instructional materials and methodology, introduction of semester system in the schools and use of grades in place of marks. The POA also said that these goals will be both for both external examinations and internal evaluations, evaluation at the institutional level will be streamlined to reduce the predominance of external examinations. The POA highlighted that a National Examination Reform Framework would be prepared to serve as a set of guidelines to the examining bodies, which would have the freedom to innovate and adapt the framework to suit the specific situations.

Thus there was a need that the researches should have focused on how to make the internal and external exams effective by reducing the subjectivity, delivering proper feedback to teachers' parents and students and improving the teaching methodology and instructional materials for proper implementation of continuous and comprehensive evaluation. The research studies conducted during this period (1993 to 2000), focused on correlates of achievement, effect of different modes of teaching and effect of diagnostic and remedial practices.

It was found that reading ability, numerical ability, problem solving ability, arithmetic ability, reasoning, fluency in reading, verbal reasoning abilities, numerical reasoning, symbol using ability, spatial ability, abstract reasoning ability, creativity and comprehension abilities were directly related to achievement in Mathematics (Rangappa, 1993; Gaurikuttyamma, 1993; Lalithabai, 1993; Sumagala, 1995; Sood, 1999; Chakrabarti, 2000; Thampuratty, 1994; Singh, 2000). The misconceptions in science were found to be related to reasoning ability, cognitive style and achievement (Ansari, 1998). Exclusive studies were done to identify the misconceptions in the topics related to science in secondary classes and diagnostic tests were constructed to find the errors committed while writing and solving the chemical equations (Saxena, 1994; Douglas, S.P. and Rao, G.S., 1997).

Studies also show that remedial teaching after the diagnostic test improves the achievement of the

students, peer tutoring was found to improve spatial ability of low achievers and students with learning disability, teaching science through multimedia to slow learners was found to be effective in secondary classes (Gyanani and Pahuja, 1996; Reddy and Ramar, 1997; Dhall *et al.*, 2000).

The importance of joyful teaching for improving the student involvement, promotion of problem solving ability, language comprehension skills and for enhancing co-scholastic areas like judgment, analysis, synthesis, critical thinking, problem understanding, finding analogy, checking equivalence was found by the researchers (Swarnalekha, 1997; Deshmukh, 1997). Effect of the inquiry training model in developing the science process skills, curiosity and creativity was found to be effective (Swamy, 1995). The use of holistic strategy for development of writing skills in language in which writing is integrated with other skills in a stepwise manner like reading, discussion (on process review writing and reading and reviewing the variety of articles), listening to tape recording and note taking, reading with awareness about the cognitive organization of the passage, readers expectation (Banerjee, 1993).

Inculcation of abilities to understand the values underlying a science course content in the secondary classes have been found to influence the attitude of the students towards science and had an effect on the learning outcomes of the students, it was also found that it is possible to identify the attitudes and values underlying the content of the science through content analysis (Chiapetta *et al.*, 1991; Chiapetta *et al.*, 1993). Similarly physics was found to promote values through the integrated curriculum approach and different curricular subjects helped in drawing nine categories of values when content analysis of different topics of different subjects was done (Amalraj, 1994; Dash, 1996 and Nucci, 2001). Similarly content analysis of the science text books led to identification of values like intellectual values (creativity), personal values (cleanliness, time alertness), special values (punctuality, co-operation), economic values (Saving budgeting) and aesthetic values (symmetry and beauty) (Amalraj, 1994). The heads and teachers of primary schools in Delhi were investigated for finding out the awareness about the concepts and the extent to which they practiced continuous comprehensive evaluation but the findings were not mentioned in the VI survey

report (Rajput and Agarwal, 1998).

The importance of remediation after diagnosis have been highlighted but the authors feel that it would have been better if the researches would have mentioned if the modification in instructional strategies used during remedial practice. The researches have highlighted about the misconceptions in science, authors feel that it would have been better if the teaching methodology for removing the misconceptions were researched, since POA 1992 emphasized on changing the teaching methodology as and when required.

However, it seems some efforts were done by the researchers towards studying the effect of different methods of teaching (joyful learning), approaches of teaching like ITM, integrated curricular approach and holistic approach on the non-scholastic areas like judgment, analysis, synthesis, critical thinking, problem understanding, finding analogy, curiosity and creativity and cognitive organization. Authors appreciate this effort of the researchers to find the effect of various teaching strategies on the non scholastic attributes since it enhances the chances to make the teaching effective and evaluation comprehensive as suggested by POA 1992.

There were efforts to find the change in achievement and attitude towards science when the underlying value of each topic was explained, authors strongly feel that the values found in this research could have been given in the sixth survey of educational research which would have helped the teachers all over the country to use it for their classrooms. The authors appreciate the identification of the values underlying science concepts like intellectual values(creativity), personal values(cleanliness, time alertness), special values (punctuality, co-operation), economic values (Saving budgeting) and aesthetic values (symmetry and beauty) given by a researcher through the content analysis of the secondary science text book, this would allow the teachers at various places to use these findings for their classroom teaching learning process.

The NPE 1986 and POA 1992 both emphasized the need for continuous and comprehensive evaluation, not much was done in this regard but there was only one study which investigated the awareness about the concept and awareness of the extent to which the teachers and heads of the school practiced

Continuous and Comprehensive evaluation, but the authors feel the if the findings of the study were mentioned it would have laid a foundation for the other researchers to research on the implementation of various aspects of continuous and comprehensive evaluation. Thus the sixth survey of educational researches shows the shift of the researches from making achievement tests, standardizing them, finding correlates of achievement, making diagnostic tests to find the correlation of the non-scholastic aspects to the scholastic aspects and the impact of various teaching strategies on the achievement of the students, which show a slight alignment of the recommendations of the policy document with the researches of that era. Such an alignment of researches and the recommendations of the policy document were not much reflected till 1992.

Suggestive Reflections on Role of Researches

During the time period 1945 to 1974, Secondary Education Commission (1952-53) and Education Commission (1964-66) emphasized on internal evaluation, teaching methods and improvement in evaluation practices, so the researches should have focused on:

- ❑ designing of objective type questions with different difficulty level
- ❑ making standardized inventories and tools for evaluating the personality traits, attitude and interest of the students in secondary classes during internal evaluation
- ❑ finding out the reasons for the difference in correlation between internal and external evaluation, so that the evaluation practices could be improved
- ❑ making strategies to improve the teaching methods so that the achievement could be improved

During the time period of 1975-82, Examination reforms document brought out by UGC, laid emphasis on formative assessment, summative assessment, use of semester system and grading pattern and thus the focus was much on continuous and comprehensive evaluation of the students. This idea given by UGC was also taken up by NCERT for conducting the summative and formative evaluation in the schools also. Thus the authors would like to

suggest that the researches in this era should have focused on the following aspects:

- integration of the questions set by various researches for different subjects to make a question bank for each school subject
- designing questions of analysis and synthesis level to help in proper summative evaluation
- finding out the pros and cons of integrating the internal exam/formative assessment marks in the final results
- finding out the strategies for planning and implementation of semester system and grading pattern

In the time period of 1983 to 88, NPE 1986 was introduced, so the emphasis was on inclusion of evaluation of non-scholastic assessment in the internal assessment, making the teaching methodology more child centered, introduction of grading pattern and design different type of instructional materials. So the authors believe that the researches during this period should have focused on:

- designing strategies for assessment of non-scholastic aspects
- finding out the grading pattern for evaluation of both non scholastic and scholastic aspects of the school curriculum
- finding out impact of different child centered teaching strategies
- designing the different type of instructional materials

During the time period of 1988 to 1992, the focus of educationist was to implement the recommendations given by NPE 1986, like inclusion of objective type items in the examinations, use of standardized tools for evaluation of non-scholastic aspects, giving proper feedback to the students after internal assessment so that they can improve their achievement. Thus the author feel that the researches in this period should have focused on the following aspects:

- designing the MCQs for the objective type of tests in different tests
- making standardized tools to assess the non-scholastic aspects

- finding out strategies for qualitative assessment of non-scholastic assessment if the teachers do not used the standardized tools
- making a blueprint to give proper weightage to different type of questions to measure the various cognitive abilities
- making a semi structured curriculum planner which can be used by the teachers for planning the scholastic and non scholastic aspects in a proper manner

During the period of 1993-2000, much emphasis was on the recommendations given by POA, 1992, like need for diagnostic and remedial practices to improve students' achievement, improvement in the teaching strategies, and integration of non-scholastic aspects during the teaching learning process. Thus the authors feel that the researches should have focused on the following aspects:

- finding out the modified strategies used by the teachers during the effective remedial teaching practice
- finding out the detailed strategies used to integrate the non scholastic areas along with the scholastic subjects
- finding out the effect of the continuous and comprehensive evaluation in the schools on students' achievement

From the above mentioned research findings in the different time periods it can be concluded that there have been research studies done on the type of assessments and purpose of assessment like importance of teachers training to make the questions related various difficulty levels as per the cognitive abilities defined by Bloom's taxonomy, use of different techniques, tools for internal assessment of curricular and co-curricular aspects of the students. The studies in the survey indicated that the purpose of internal assessment was for giving proper feedback to the student, so that students' all round performance can be monitored. The use of diagnostic tests and remedial practices to improve the students' achievement was also an important point that emerged from the surveys.

It emerges from the reviewed studies that the achievement in examination is not only related to cognitive abilities like creativity, numeric ability, abstract reasoning, comprehension, logical thinking

but it also has its correlation with psychomotor abilities like practical experiments and involvement in learning through performance activities and affective characteristics like interest and attitudes. The reviews also suggest that there is an impact of teaching learning process, the feedback given to the students and the diagnostics and remedial practices on the performance of the students in the examination.

Moreover, the school system is bound not only to improve the achievement of the students but also to help in all-round development of the students. If all round development has to be done it is not only important to focus on the conduct of various curricular and co-curricular activities but also on the assessment of them, to give an effective feedback to the student about their performance. With this intention the National Curriculum Framework (2005) and National Knowledge Commission (2008) laid lot of emphasis on the revamping of examination system. CBSE worked out the framework for overhauling of the internal school assessments which was called as the CCE (Continuous and comprehensive evaluation)(CBSE teacher's manual, 2011-12). The framework focused more on quality internal assessment so that it can lead to enhanced learning.

However, the authors would like to pin point that the concept of continuous and comprehensive evaluation was recommended by NPE 1986, and was re-emphasized in POA 1992 but its implementation in Schools began in the year 2000. In every society research and its findings have a key role to play in bringing reforms and innovations. If CCE is considered as a delayed reform in the examination system, though it was suggested in 1986, this delay of 14 years may be attributed to the researches and the lack of insight of curriculum designers like NCERT and SCERTs.

However, though the delay can be attributed to curriculum designers and the researches conducted, the authors strongly feel that researches had the major role to play, because it is the findings of the researches that enlighten the curriculum makers and policy makers to bring reforms in the system. The authors would like to emphasize that if the researches conducted in various time periods were in alignment with the reforms suggested by the Recommendations of the Educational commissions

and committees, the school education system would have been much evolved than it is now.

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