Beyond Testing and Grading:  
Using Assessment to Improve Teaching- Learning

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Abstract

Assessment being an integral part of the learning process calls for appropriate assessment methods and materials to measure students’ understanding of subject areas and their ability to achieve more relevant goals, such as being able to explore and to think critically using reasoning. Traditional forms of assessment provide a method for assigning numerical scores to determine letter grades but rarely reveal information about how students actually understand and can reason with ideas or apply their knowledge to solving problems. This research study traces the current trends in educational assessment and find out how CCE has been perceived by teachers, students and parents, its effect on instruction, addressing equity concerns and learning outcomes, the challenges faced by teachers and suggest appropriate assessment instruments and procedures.

Keywords: Assessment, continuous and comprehensive evaluation, student learning.

Introduction

As the Indian school education system grapples with how to dramatically improve student academic achievement, the questions it raises are—if assessment reforms are not been carried out effectively, can the movement ultimately succeed? The learning scenario surveys conducted in India have been exposing the dismal status of education in the country. The report of Programme for International student Assessment (PISA), conducted to evaluate education systems worldwide ranks Indian class 10 children 73rd in the world out of 74 countries’ and Annual Status of Education Report, rural (ASER) has been regularly illustrating the alarmingly skewed state of affairs in Indian schools and states that children in Indian schools are learning and retaining less knowledge than they did before the implementation of RTE Act 2009. Among the students coming out of the school education, far too many are unprepared for the rigors of higher education and today’s workplace. Why is it so? Reforms in curriculum aim to bring about solutions to many of the burning issues- including examination reforms. The process of change is complex and the consequences of getting it wrong can be severe.

For the meaningful assessment of child’s understanding of knowledge the Right of children to free and compulsory Education (RTE) Act, 2009, stated that while laying down the curriculum and evaluation procedure academic authority (National Council for Educational Research and Training, NCERT) shall prepare guidelines for putting Continuous and Comprehensive evaluation (CCE) into practice. In pursuance of this policy statement, NCERT is in the process of developing a package on CCE for teachers, teacher educators and administrators. Assessment for the learners up to higher secondary level of education (for CBSE affiliated schools, some of the state board schools) in India is based on school assessment and has tried to implement some form of CCE as they understand it. The 10th class board examination has been made optional for student continuing in the same school affiliated to CBSE. CCE has been introduced in the curriculum which is guided by the principles laid down in NCF 2005. As per the Central Board for Secondary Education (CBSE) guidelines provided in manuals and sourcebooks, the learners are evaluated on the basis of the assessment made by the teachers in the four formative assessments and two summative assessments carried out at the school level. These scores are added up to be used as final grade at the end of each academic year. Although, guidelines are provided to teachers the lack of clarity and lacunas in the guidelines itself effects adversely the implementation and attainment of desired objectives. It also may not be helping to ensure fairness in the assessment of learners as the current practices at schools allows for malpractice in many ways. The situation deserves the focus of academics.

NCF 2005 advocated for school-based CCE in order to i. Reduce stress on children, ii. Make evaluation comprehensive and regular, iii. Provide space for the teacher for creative teaching, iv. Provide a tool for diagnosis and for producing learners with greater skills. But the changes in classrooms have often been superficial and have not made the expected contribution to pupils’ school performance. The way in which CCE has been conceptualized by different academicians, boards and the teachers and the problems have all contributed towards the same. NCF 2005, advocates for initiating national mission, which should bring teachers, educationist and scientists on a common platform; launch new ways of testing students that
would reduce rote learning and examination related stress; reduce the need for infuriating multiplicity of entrance examinations; and undertake research on assessment activities that focus on the entire personality of the learner other than formal scholastic competence. All these fundamentally need the overarching reform of teacher’s empowerment. The CCE strategies should aim at deriving flexible and implementable scheme according to functioning of each school so as to make way for diagnosis, remediation and enhancing learning.

The introduction of CCE in place of the board examination intends to enhance learning by creating varied avenues for students instead of determining the grade/marks of student at one point of time using the mode of pencil-paper test. On the whole, varieties of assessment modes are offered comprising of assignments, projects, debates and quiz competitions for the assessment of learners. This massive change, however, has not brought out expected changes in the performance of student learning as evident from the ASER3 and PISA7 reports. In light of these, the way CCE has been conceptualized by teachers, children and even their parents needs a relook. Besides this, the inherent problems in the system, socio-economic background of children also may hinder the effective implementation of CCE. Lack of fairness in the assessment and the harassment faced by students due to unhealthy practices by teachers all produce harsh consequences in student learning.

Research studies show that student learning have been adversely affected by test papers and ‘teaching to test’16. Evidences from the field show that students’ learning is not promoting analytical and critical thinking skill, but are engaging in surface learning and rote learning in a disorderly way3,9. To keep these harmful effects of examination to the minimum and improve student learning formative assessment methods have been advocated10,14.

Following which various countries including Australia, Canada, Denmark, England, Finland, Italy, New Zealand and Scotland11 have been following formative assessment methods. Committees and policy documents pertaining to Indian education way back from Kothari commission, 196612 National policy on Education13, 1986 Yashpal committee report14, 1993, National Curriculum Frameworks15, NCERT, Position paper on Examination Reforms16. NCERT have all stressed on the importance of better assessment technique of students learning. The need for school based assessment comprehensive of all aspects of students’ personality, interests and attitudes have been reflected on these policy statements and documents.

Objective of the Study: With the introduction of the policy of ‘Education for all’ in the Indian education system, giving a chance for all school age children to attend school, the range of abilities of the learners in a classroom is much larger. In conventional system of assessment, examinations were used for providing grades and marks for finding out the best students (comparing against each other) and for passing them on to the next grade or levels. The aim of countries now is not just grading or marking but moving beyond to get all the learners succeed in school. This provides scope for school based evaluation. However, the survey report which exposed the dismal status of schooling and basic learning in rural India attributes implementation of CCE as one of the reasons for the deterioration. This is an issue that requires greater study16. Keeping these in mind, the study focuses on the following: i. State the current trends in educational assessment and find out how CCE has been perceived by teachers, students and parents. ii. Effect of CCE on instruction, addressing equity concerns and learning outcomes and identifying the challenges associated. iii. Try out of CCE in the field and present the impact on learning for suggesting appropriate assessment instruments and procedures

The study based on observations conducted in schools and interview with teachers, parents and students informally intends to provide some indication on the way Continuous and Comprehensive Evaluation (CCE) has been perceived by teachers, students and parents and its effect on instruction, addressing equity concerns and learning outcomes. It also spells out the benefits derived by implementing CCE through its try out in school and then suggests measures for carrying it out effectively. There is a lack of research studies that have looked at these issues in-depth.

Research Methodology

The findings of various reports which threw light on the low learning outcomes of the students in India and the need for addressing the malaise associated with the existing examination system and implications for facilitating enriching and equitable teaching-learning processes in classrooms prompted this study.

The design of the intervention was based on the CCE package (forth coming) of NCERT. Analysis of class observations, informal interviews with the teachers indicate that though teachers were keen to implement CCE and enhance learning practice, but lacked understanding of implementation techniques and were concerned about the disruption to their teaching practices, and in particular about the freedom it gave to students in the classroom.

This study portrays the effect of continuous assessment on students learning, observed over a three month period after imparting teaching and the daily classroom assessment using various activities and putting in efforts for remedial teaching paying attention to. This showed how the use of continuous assessment can support teaching-learning. The study relied on qualitative data, comprising of informal interviews, notes on classroom observation, analysis of students answers etc. These provided an answer towards the inherent problems in the system. Based on the findings of interviews, notes on classroom observation and the experience of the researcher during the try out, the study comes up with the policy implications and suggestions for successful implementation of CCE.
The tryout of CCE package were conducted for relatively short duration and therefore lacks clarity whether the learners will be able to retain the acquired skill and knowledge over an extended period of time.

**Results and Discussion**

**Impact of CCE in School Education: Examination reforms and its impact on teaching-learning:** Any assessment of student achievement has the potential to lead educational reforms when stakes in forms of rewards, comparison of schools, promotions, are related to the results of assessment or the assessment is considered to be a precise indication of teaching-learning. Indian education system have often been criticized that the task (assessment) has usually wagged the dog (of teaching and learning). The excessive importance gained by assessment results possesses the danger of instruction being guided by assessment results and other goals of curriculum being ignored. This tailoring of instruction to the assessments can be liberated by de-emphasising exams. But it should also be compensated by better assessment methods that promote the type of instruction required for enhancing-learning. This necessitates professional development for teachers, principals, administration without which the changes in teaching-learning in the classroom resulting from the CCE will remain superficial, at best.

**Meeting Equity Concerns:** There is no reason to believe that a shift from traditional pencil-paper test to the newer continuous forms of assessment has resulted in betterment of position of socioeconomic disadvantage groups. Instead disadvantage regions and groups have been negatively affected by the new educational reforms. The systemic barriers does not give them an opportunity to move ahead to compete with and find place of dignity. They do not acquire the skills and competencies required for sustaining in today’s competitive world. The privileged group with their access to the various sources are capable of acquiring the skills and competencies whereas the marginalized being the first generation with no supportive mechanisms and facilities both at home and school fall back without acquiring the vital problem-solving and critical thinking skills required in the job market. Students also suffer on account of unequal availability of resources. Prior knowledge assessment which helps to ensure equal opportunity of students to learn were rarely resorted by teachers.

Teachers while providing remedial teaching on occurrence of poor performance confined themselves to basic understanding and did not put any effort for providing higher order skills leading to the widening of gap between the marginalized group and students from the advantaged group. This confinement to lower level classes, less exposure to learning materials, lack of use of technology combined with their socio-economic isolation only resulted in perpetuating inequity.

**Enhancing quality:** Criticisms leveled against the examination system prevailing earlier was its excessive focus on memorization and recall, marking or grading students for the quantity of work rather than quality, the excessive reliance on test papers usually, summative assessment for grading or marking with no feedback action and the excessive academic load on students. There was no place for remedial action and therefore assessment did not enhance quality. The implementation of CCE was with a view to eliminate these problems and enhance quality of teaching-learning in schools. The ASER survey report holds implementation of CCE as one of the reasons for the decline in quality in learning.

**Problems identified:** The main challenge observed by the teachers following the implementation of CCE in the study was lack of understanding the purpose and nature of CCE, which created difficulties for their practice. The term continuous in CCE turn out to be nothing more than a series of tests or ‘mini examinations’ which resulted in conduct of tests in every week. These assessments remain ‘unnatural’ only adding stress to the students. Comprehensive for them was assessment of co-scholastic areas. They ended up marking grades for life skills, work education, attitudes, values etc and later faced difficulties in explaining the reasons for assigning the grades. This often led to labelling of students and complex attitudes. Teachers spent too much time on filling up the tables and recording, neglecting everyday classroom assessment. In the name of CCE forced on them, teachers often resort to mechanical way of assessment which does not produce any impact on the teaching-learning, both being done independently. The students have been asked to write assignments, conduct project studies, experiments and make models which are not at all related to the subject matter or helping them in enhancement of learning. Students also view these CCE works to be just for getting marks or grades and end up buying it from the market, downloading from the internet etc without even reading it for once. The percentage share of teachers assessing students using different modes and techniques of assessment other than test papers and constructing test items on the basis of the learning outcome were very low indicating that the teachers were just ‘continuously testing’ as per the direction. Research studies conducted by Ugolunwana and Mastapha and Opoola have pointed out that many practicing teachers at all levels of education are lacking ability in carrying out effectual assessment of learning and most of them do not know how to construct and use appropriate assessment methods and end up resorting to test papers. In addition, survey results show that teachers do not undertake remedial teaching based on information got from assessment, provide qualitative feedback, make out students’ competencies and weaknesses and use it to direct the student and progress teaching-learning. Lack of teachers’ knowledge and skills to proficiently analyse student achievements have been cited in studies by Heritage; Herman and Gribbons; Plake and Impara; Shepard. Teachers also reported that they did not know ‘how to do it’. Better understanding of the educational principles of the reform helps teachers in adapting to the new demands and changing
perspectives. The training programmes, the materials in circulation and directives given by authorities all added to their confusion. All these gave teachers only different assessment techniques with no clarity on how to use it, when to use it and what to look for. Going through the instruction was time consuming and produced no improvement in their situation.

For example, a school teacher stated, ‘I have been conducting CCE as per instructions given to me. I have made my students do many projects models, write assignment etc, but now I find difficulty in evaluating these. How do I evaluate? What should I report?’ She admitted to have less idea of using different methods of assessment, what to look for during assessment and how it can help her in enhancing the learning of the student. Teachers admitted to have never received any training for understanding or using the Continuous assessment methods.

‘We were just given a booklet of more than 10 pages which we have to keep as record of each child. No directions have been given on how to fill these up and now we have just pasted the photograph of the student’ says a government school teacher when asked about her experience with CCE towards the end of the session.

Assessment was seen as a different entity demarcated from teaching-learning and therefore resulted to be time consuming. Fitting assessments into their busy classroom schedule was difficult tasks as assessment was done separately with no connection to the learning. The filling up of the report cards which contained pages were time consuming and so did not have enough time left for assessment in other areas or for teaching. They were not aware of systematic note-taking on students, writing diaries and so ended up with resorting to the textbook developed by NCERT. The chapter on Livelihoods – rural and urban is dealt in the Social and Political Life textbook developed by NCERT. The chapter intends to make the learners explore the different ways in which people earn their living in rural areas and urban areas, understand the variety in the livelihoods and compare their life situations, analyze the working conditions of people and problems and challenges faced by them, examine whether people have equal opportunities to earn a living. For integrating assessment into the teaching-learning process, the class started by providing students an activity which will help the teacher in understanding the knowledge that the learner has acquired from her day-to-day life and surroundings. The transaction of the topic was undertaken using the following techniques. i. Oral examination: It allows investigating knowledge, skills and commitment of the students in a better manner than done through written test papers. But it has the defect on increasing the stress of students while undergoing live interrogation and the inadequate wait time for thinking. ii. Open-ended questions: This enables the students to critically analyse and respond in their own words. iii. Performance-based items or events: Activities were given which required students to draw or perform an action. Quiz competition were carried out which generated interest and participation among the students. iv. Projects and Assignments: Topics were given and groups were asked to submit and present their thinking and findings at the end of session. v. Portfolios were maintained by the students which helped to show the range and improvement in quality of the student over the period. These remained as progress markers.

Grading and reporting is another challenge faced by teacher. They still looked for what the students do not know instead of looking into what they know. Assessment should aim at discovering what the learner knows, understands or can do rather than using it for assessing whether the learner knows, understands or can do a pre-determined thing. Feedback to be effective must recognize positive aspects of the work and not only its shortcomings. The format of assessment prevalent in the schools showed that the convergent assessment practices were still in use, which had the following practical implications. i. Precise format for assessment which forced the teacher o stick to the rules framed by the authority, for e.g. having two formative assessments followed by one summative assessment. ii. In respect of various co-scholastic areas teachers had to provide tick lists and can do statements only. iii. Evaluation still remains to be judgmental or quantitative provided only at the end of the session with no chance of remediation. It remains to be measurement of past and current achievement rather than orienting more to future development. The focus still remains to be on the content and not the process. iv. Teachers were just ‘administering’ tasks of assessment constrained by rules and frame work with no connection to the normal teaching practices.

Findings from the interactions with the teachers revealed that they faced various problems while implementing the continuous and comprehensive school based assessment. They mainly pertain to: i. Large number of children in the class, ii. More classes to handle iii. Time consuming, iv. Students irregular in attending class, v. Lack of resources, vi. Inadequate training.
admitting the child and are not interested in the learning of their ward. The full and constructive feedbacks were given regularly to students only.

The results from the study after the CCE implementation showed that many benefit have been identified and the performance of students were better in respect of interest, participation, level of involvements, extent of abilities and skills and in effect the overall educational performance. The interest shown, the level of involvement and the improvement in the skills and competencies can help teachers to understand the benefits of continuous assessment activities. The use of multiple modes of assessment during the teaching learning process helped to ensure participation of all children and demonstrate their competencies rather than appear deficient because of their socio economic cultural background. This evidently showed that CCE would bring about improvements in the teaching-learning process and brought out the positive influence that examination reforms had on the learning outcome. Open discussions or conversations elicited a sound version of students’ original conceptual understandings and the logical reasoning behind their explanations. The results of the study were consistent with the results of research studies conducted in finding out the effects of CCE on teaching-learning by Kapambwe; OECD; Kamangira; Black and William; Puhl. Self assessment and peer assessment were helping in bringing about changes in their attitudes towards their classroom and also bringing in self esteem. The results indicated that these also contributed to improved learning.

Implications of the Study: The study findings reveal that schools were not implementing CCE in the way it has been envisaged and therefore have not resulted in enhancing educational quality instead has been affected adversely. For instance: student learning are not assessed using different assessment methods instead are being continuously put to face the stress of continuous testing. The implication of this being lack of comprehensive evaluation of the student. In consequence, the students at the end of their schooling, their potentials are not maximally utilized and are not adequately prepared for the rigors of higher education and today’s workplace. Implementation of CCE in schools can be ensured to bring about better results by taking following measures. i. Teachers should be provided with exemplar assessment tasks and assessment administration instructions to give them clarity on the different techniques and how it has to be carried out. Training programmes to impart the required knowledge and skills in assessment designs and procedures, along with opportunities to prepare and demonstrate methods of assessment should be conducted on regular basis. ii. Review workshops should be held where teachers shall meet frequently and share the experiences and measures taken by them during the implementation process. iii. Different teaching and learning materials should be provided for helping teachers and successful implementation of CCE. iv. Parents and Students feel quite uncomfortable with the methods used in CCE and therefore they have to be sensitized in order to gain support. v. While implementing CCE, the teacher has to facilitate the student from the beginning of the given activity/project to the end, while ensuring that the outcome mainly reflects the students’ effort and also makes her/him attain skills and competencies.

"Instead of giving the children a task and measuring how well they do or how badly they fail, one can give the children the task and observe how much and what kind of help they need in order to complete the task successfully. In this approach the child is not assessed alone. Rather, the social system of the teacher and child is dynamically assessed to determine how far along it has progressed“.

Conclusion

The implementation of CCE has been facing many challenges and therefore the benefits have not filtered into the education system. For the teachers adapting to a new system is difficult and requires training and addressing their challenges. Their practical problems as revealed in the study has to be addressed to which will enable teachers to eventually begin to use the classroom assessment correctly and effectively. Teachers need training in the direction to understand how relationship between learning and assessment can bring about desirable effects and the variety of techniques that can be used in achieving this. The importance of providing timely feedback describing the nature of progress a pupil is making and appropriate remediation intervention have been revealed in the study. Dissemination of research outcomes in this direction will help teachers, parents and students in overcoming the apprehensions attached to the CCE.

Bringing assessments near to their real-life situation can provide an opportunity for students to show their competencies and be beneficial for them in the long run. The emphasis should shift from improvement of learning of student rather than achievements. Assessment should aim at discovering what the learner knows, understands or can do rather than using it for assessing whether the learner knows, understand or can do a predetermined thing. This necessitates the linking assessment to teaching-learning.

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