Some Viable Strategies for Classroom Assessment — A Field Experience

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Abstract

National Curriculum Framework (NCF) 2005 and its position paper on 'Examination Reform' have recommended the implementation of Continuous and Comprehensive Evaluation (CCE) at all levels of school education for maintaining quality. RTE Act 2009 also stressed this aspect through its section 24(1)(d) and section 29(2)(h). Many state boards and national board like CBSE have already initiated the process of assessing students learning through different strategies as a part of Formative Assessment (FA) and Summative Assessment (SA). The present article elaborates some of the assessment strategies practiced by the author as a part of classroom activity during a three-month field work at Central School for Tibetans, Bylakkupe, Karnataka. The article illustrates experience of administering peer assessment, self assessment and quiz as classroom assessment strategies in an integrated way. These strategies can embed with learning activities in a learning environment which offers collaboration and cooperation. Peer assessment and self assessment are two effective strategies for encouraging students to involve in the learning process for improving their performance. Through the critical review of the work done by themselves, the students will be able to recognise the strong as well as weak areas of their learning during the activity. Here they are assessing critically both what and how they are learning. Even though most quiz programmes are summative in nature, one can innovate it by changing the procedure as an effective formative assessment strategy. This is also known as formative use of summative assessment. Here quiz has been used in the form of a group game to assess student's performance. It will help the teacher to assess the ability of each student to frame questions, derive the answers in group setting, ability to ask and respond to the questions. The whole process will help the teacher to get a clear idea about the level of performance of individual students in a particular topic. The procedure followed by the teacher and the feedback received from the students about these different strategies are elaborated in this article.

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The Context

NCF 2005 and its position paper on 'Examination Reforms' examined in details the ill effects of the traditional system of evaluation in school and suggested viable method of student evaluation that is in tune with constructivist methodology. The framework emphasised the need of experimenting varied models of assessment beyond the paper-pencil tests. They also recommended the implementation of Comprehensive and Continuous Evaluation (CCE) at all levels of school education. While mentioning about the duty of teachers and the quality aspect of education, the RTE Act 2009 also emphasised the importance of student assessment through its two sections namely 24(1) (d) and 29(2) (h). Section 24 (1) (d) of RTE Act states that a teacher appointed as per the rules shall perform the duty of assessing the learning ability of each child and accordingly supplement additional instructions, if any, as required. Section 29 (2) (h) mentions that concerned academic authority should give importance to CCE of child's understanding of knowledge and her/his ability to apply the same while framing school curriculum.

As a consequence of the recommendation of NCF 2005 and based on guidelines of SSA and RMSA on quality concerns in school education, many state boards and national board, like CBSE have initiated the process of CCE at different levels of school education. Specific guidelines were developed by CBSE in order to implement CCE at different schools following their curriculum. The guidelines provided different suggestive strategies for Formative Assessment in order to help the teachers for implementing CCE in an appropriate way.

The Significance of Classroom Assessment

Assessment serves students' learning in various ways. Different forms of assessment will provide feedback to teachers as well as students and that will guide teaching and help them in modifying teaching strategies and materials to ensure student improvement. It assists teachers to monitor progress and diagnose individual and/or group difficulties throughout the teaching learning process. The feedback provided to students in the form of their progress reports will, of course, help them to enhance motivation and direction for further learning. Based on the occasion as well as purpose of assessment, it can be theoretically classified into two categories, viz, Formative Assessment (FA) and Summative Assessment (SA). Current trends in assessment focus on judging student progress in three ways: **assessment *for* learning, assessment *as* learning** and **assessment *of* learning**. Each assessment approach serves a different purpose. Many researchers

classified first two under formative assessment and the last one as summative assessment.

Assessment for learning is a teacher initiated student-context process and is integrated with each and every learning activity in the classroom. In this process of assessment, we can use a range of methods to collect data and to provide descriptive feedback to students to promote students' learning. Teacher can use it to bridge the gap between student's current status and the desired outcome.

Assessment as learning is a student-oriented process. Through the critical review of the work done, by herself or himself, the student will be able to recognise the strong as well as weak areas of their own learning during the activity. Here they are assessing critically both what and how they are learning.

After the end of an instructional process in order to find out the extent of learning and for informing about it to the different stake holders, one can utilise the assessment process, which is known as assessment of learning. It takes place at specific times in the instructional sequence, such as at the end of a series of lessons, at the end of a unit, at the end of a term, or at the end of a school year. Its purpose is to determine the degree of achievement of competencies in the subject. This also gives students, a chance to apply the concepts formed or demonstrates their new knowledge and skills in different situations independently.

Assessment Strategies — Trends in the Classroom

Three-month field work at Central School for Tibetans, Bylakuppe, Karnataka, has given the author an opportunity to observe and discuss about the classroom assessment practices followed by the teachers and experiment some of the strategies to know its feasibility in the classroom.

Assessment strategies used by the teachers were collected through different sources, viz, classroom observation, discussion withteachers and through students' feedback. The information received through all these sources show that predominantly teachers used paper-pencil class test as one of the important strategies for classroom assessment. During the discussion with teachers, they said that before every Formative Assessment (FA), they are supposed to conduct 4 such class tests. When I asked about the reason for conducting it, they replied that the CBSE is asking for the evidence of Assessment. Hence, the best way is going for a paper- pencil test. Apart from the class test, they occasionally use seminar, assignment, project and laboratory activities. The feedback given by students also supports these. Some of the feedbacks are presented below:

They conduct Test in class & give project to us
And oral, and in some they call us
to the board and tell us to write what you
know about this chapter. Some shows practically
of the chapters.

Different method of teacher used.
Semener, Test, Assignment, project, VIVA, Group
activities are used by teacher to make is in CCE.

We used to have only test in & project in
tibetan subject but in science, we have seminor,
class test, project. In english, we use to have
conversation, projects & assignment, class test &
having interaction between student & teacher.
In social, there are project & assignment, class test,
power point to get our interest.

Almost all the teachers use various methods like
projects, Assignments, Class test. Only in science we
have sometimes seminar. From all the subjects, Maths
is the most difficult subject to understand & learn.
The teachers follow the CCE rules and teach us
according to it.

The different assessment strategies used by teachers cited above were implemented in a manner by considering assessment

process as an independent activity. But the concept of assessment as learning and assessment for learning recommends for such activity that can be embedded with teaching learning process by integrating it with classroom activity. We can use a variety of such activities for assessing students. Observation, Conversation, Peer Assessment, Self Assessment, Quiz, Journals, etc are some of such activities.

Assessment as Learning – the Role of Peer Assessment

Peer-assessment involves one student's assessment of the performance or success of another student. It is an assessment strategy which involves students' decisions about others' work that would normally take place when students work together on collaborative learning activities. The value of peer assessment as a tool for formative assessment to enhance the learning experience and student achievement was supported by many researchers (Johnson, 2004; Butler and Hodge, 2001). One of the ways in which students internalise the characteristics of quality work is by evaluating the work of their peers. However, if they are to offer constructive feedback, students must have a clear understanding of what they are to look for in their peers' work. The teacher must explain expectations clearly to them before they begin.

Let me illustrate how I organised peer assessment as an assessment strategy in an embedded way. I experimented this in one of the sections of Class X while teaching the topic 'Basic Proportionality Theorem'. For helping students to comprehend the concept of basic proportionality theorem, I began the class with a group activity.

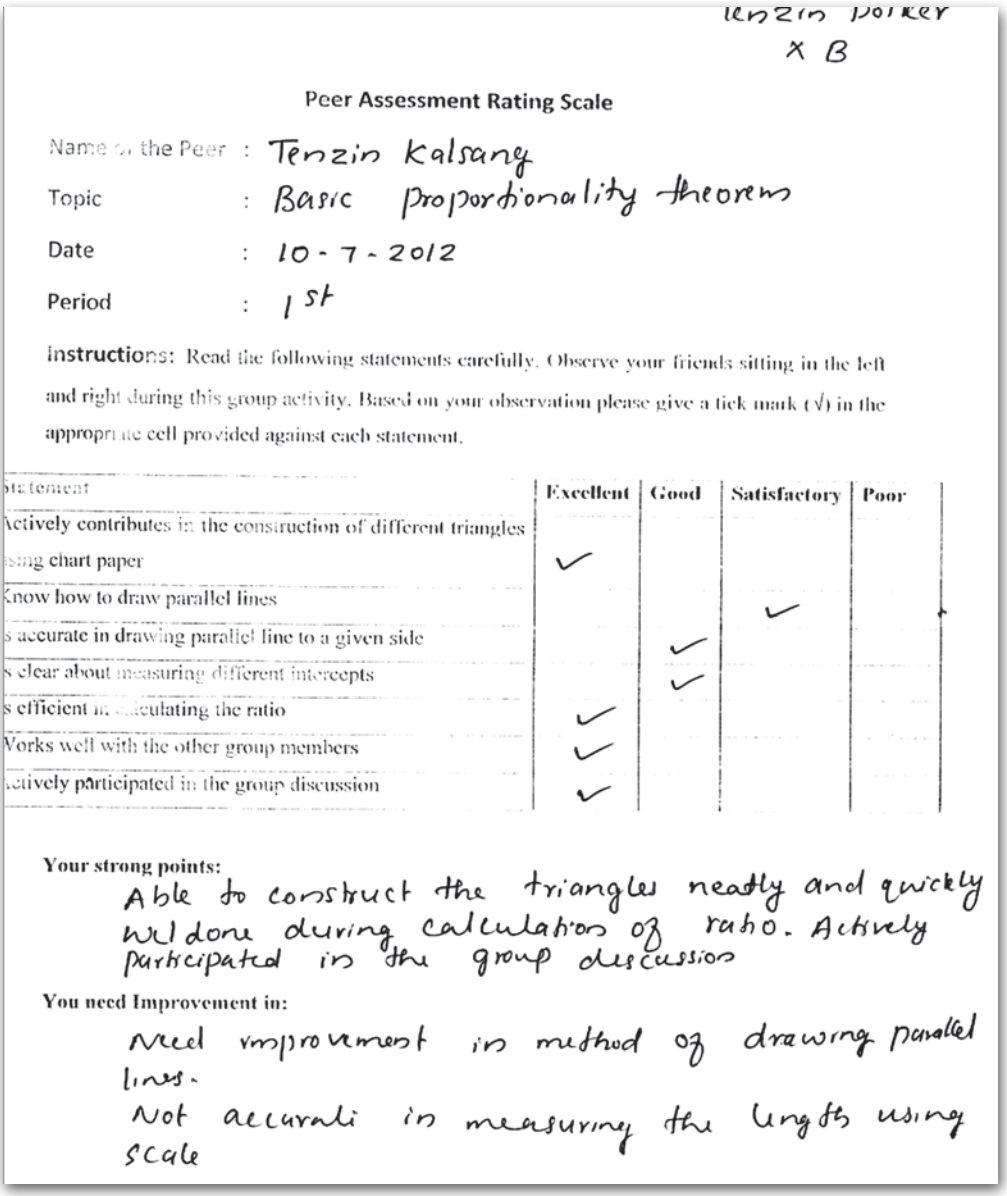
A brief introduction was given. Students were divided into four groups and one among each group was selected as leader. Each group was asked to cut different types of triangles from chart paper (at least five with different type) and told them to give the name like ABC, PQR, etc

They were asked to draw a line (with suitable name) parallel to any one side of the triangle by touching it other two sides.

In the next stage, they were asked to measure the length of the intercept made by the line with the other two sides and they were asked to prepare a chart which is given below

Triangle	*Length of Intercept made at 1st side*	*Length of Intercept made at 2nd side*	*Ratio of Intercept made at Ist side*	*Ratio of Intercept made at 2nd side*	*Relationship between the ratios*
Δ ABC					
Δ PQR					

At the same time, each student was asked to observe how her/his peers sitting either side performing in the group activity. They were



Tenzin Dorker
X B

Peer Assessment Rating Scale

Name of the Peer : Tenzin Kalsang
Topic : Basic Proportionality theorem
Date : 10-7-2012
Period : 1st

Instructions: Read the following statements carefully. Observe your friends sitting in the left and right during this group activity. Based on your observation please give a tick mark (√) in the appropriate cell provided against each statement.

Statement	Excellent	Good	Satisfactory	Poor
Actively contributes in the construction of different triangles using chart paper	✓			
Know how to draw parallel lines			✓	
Is accurate in drawing parallel line to a given side		✓		
Is clear about measuring different intercepts		✓		
Is efficient in calculating the ratio	✓			
Works well with the other group members	✓			
Actively participated in the group discussion	✓			

Your strong points:

Able to construct the triangles neatly and quickly
Well done during calculation of ratio. Actively participated in the group discussion

You need Improvement in:

Need improvement in method of drawing parallel lines.
Not accurate in measuring the lengths using scale

asked to fill the peer assessment proforma given to them for this purpose. The criteria used in the proforma and the method of filling it were also explained during the initial introduction. A sample of completed proforma is enclosed here under

Each student is supposed to assess and assessed by two students. Clear direction and assistance were given to students at each stage during the activity. After the end of the activity, the filled in assessment proforma were collected and analysed. In majority of cases, the pair of assessment done about a particular student was found to be somewhat similar. Only in few cases, it was found contradictory. The very next day, I had a discussion with students about their new experience. They all were enthusiastic about the activity but they told their apprehension of observing other students and simultaneously participating in the classroom process. The contradictory opinion regarding the performance of a particular student throws light on two important aspects to be considered while organising peer assessment. The first one is the need of proper training to the students about the procedure of peer assessment. The second one is the importance of ensuring objectivity in assessment. There will be some tendency of showing favours to the friends. This type of personal feelings will effect assessment. This can be minimised by giving students proper orientation about the importance of the peer assessment as a strategy for improving their learning, and clear guidelines for filling peer assessment proforma.

Assessing their own cearning
Self - Assessment

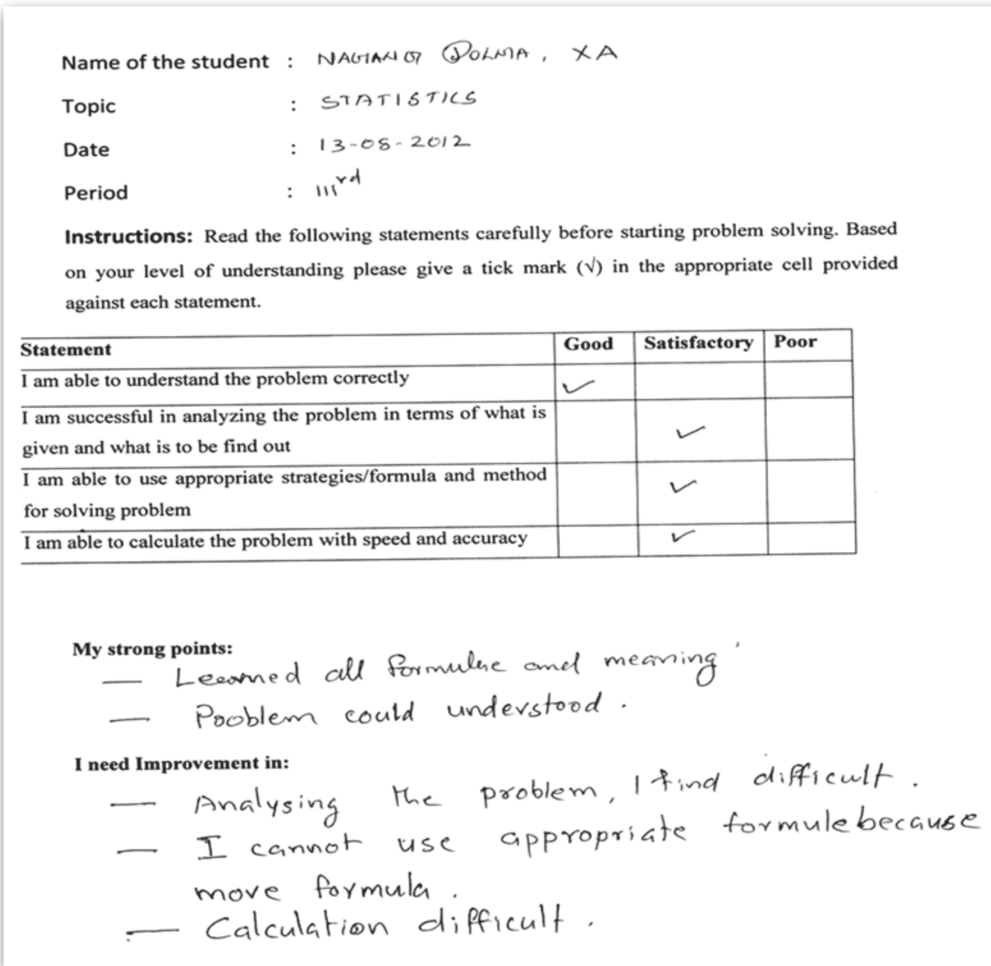
In a similar fashion, we can also organise self-assessment as an effective strategy for student assessment during classroom activity. This is nothing but reflection by the students about their own work. Self-assessment is the ability of a student to judge her/his performance, that is, to make decisions about one's self and one's abilities. It is a process in which student reflects on and reflects in one's own actions to identify the weaknesses and strengths. Here, the focus of assessment is to improve students' learning by evaluating themselves, their progress and difficulties. By giving students opportunities to reflect on their own actions, teachers may help them in developing metacognitive and other general learning skills.

A similar type of proforma can be developed and each one is asked to fill the proforma after completion of the activity. Even teacher can use checklist, rating scale, or rubric instead of a descriptive proforma like above-cited. Main advantage of self assessment is that it allows students to develop awareness of their performance as well as their gaps. This awareness will trigger

them to work out a plan for further improvement. The feedback will surely help them to set short-term goals as well as long-term goals. By properly prompting students to complete the self assessment tasks, teachers can support students to set the goals and encourage them to reach the goal.

I tried to incorporate self assessment strategy while teaching the chapter 'Statistics' for 10th standard students in a problem-solving situation. The students were asked to solve the problem. At the same time they were told to introspect about their work and fill the self assessment inventory and provide descriptive feedback. A sample inventory is given below:

Self-Assessment Inventory for Problem solving



Name of the student : NAGIANG DOLMA , XA

Topic : STATISTICS

Date : 13-08-2012

Period : IIIrd

Instructions: Read the following statements carefully before starting problem solving. Based on your level of understanding please give a tick mark (√) in the appropriate cell provided against each statement.

Statement	Good	Satisfactory	Poor
I am able to understand the problem correctly	✓		
I am successful in analyzing the problem in terms of what is given and what is to be find out		✓	
I am able to use appropriate strategies/formula and method for solving problem		✓	
I am able to calculate the problem with speed and accuracy		✓	

My strong points:

— Learned all formulae and meaning

— Problem could understood.

I need Improvement in:

— Analysing the problem, I find difficult.

— I cannot use appropriate formule because more formula.

— Calculation difficult.

This strategy gives students an opportunity to assess their ability to solve mathematical problems. They can reflect on their ability to explain the problem, recognise meaningful information in the problem, their ability to use appropriate formula, difficulty level and about the speed and accuracy of problem-solving. Finally, students were asked to provide reflective feedback regarding the areas of concerns.

Assessment of Learning — Quiz

The most frequently used tool for assessment for learning is written test/examination. We can use quiz also for assessing the students' performance either after the completion of a topic or a unit or even after a term. I made an attempt to use quiz as a game for assessing student achievement in the other section of 10th standard after the completion of the chapter 'Statistics' Initially, the whole process started with an individual activity. I told the students to prepare at least five questions with answers from the chapter 'Statistics' as home work. Next day, the class was divided into four groups by using random method. For that, slips were prepared by writing different statistical terms (Mean, Median, Mode, and Class Interval). Accordingly, all students with slips inscribed Mean named as 'M', and others are 'Me', 'Mo' and 'Ci' respectively. After group formation, they were asked to sit in groups and told to discuss the questions they independently framed within the group about their style, difficulty and usability. Each group was directed to select best 10 questions with their answers from items they constructed independently. They were given about 25 minutes for this process. During that period, I spent rest of the time in explaining the different procedure of quiz competition to be organised next day.

Rules and Procedure of Quiz

- Match will be between two teams and other two teams will be audience.
- All members from each group will be seated face-to-face and the order of sitting will be decided by lots.
- First member from one group will ask the question from the last member from the other group.
- The entire group can spend maximum 2 minutes for answering the question, if she/he succeed in the attempt within the stipulated time, the team will get 5 points, otherwise the question will be passed on to the adjacent person. If she/he gives the correct answer and the allotted time of 2 minutes is not completed she/he will get 5 points; if the answer is right and the time exceed 2 minutes, she/he will get only 3 points.
- If all members from the group failed to give correct answer

then the question will be passed on to the audience. If audience succeeds in giving the answer they will get 5 points, if the total time not exceeds 2 minutes otherwise 3 points.

- If none of the members from audience gives correct answer, then the team who posed the question will get 3 points provided they should give correct answer with explanation. If they failed to give this, then a penalty of minus 3 points will be given to them.
- After the question by first team, the first member from the opposite team can ask the question to the last member from the other team.
- The process will be continued like this. Maximum time for one match will be 40 minutes.
- The team getting highest point will be declared as the winner of the match.

This strategy helped me to assess the ability of students to frame different questions, to review the whole concepts in statistics, capacity of problem solving in group setting, ability to ask and respond to the questions, and cooperation and competition in group setting. The whole process also helped me to get a clear idea about the degree of performance of individual students in the particular topic. The degree of involvement of students in the entire activity is another significant advantage of this activity. They actively participated and enjoyed it like a game.

Final Thoughts...

Considering assessment as an independent component of classroom teaching is one of the reasons for non-implementation of CCE in right spirit. The awareness and proper practical oriented experiences will help the teachers to make assessment as an integral part of teaching learning process rather than an independent component. The idea of assessment as learning and assessment for learning can be practiced in the right sense, only if, we are able to integrate the assessment procedure with day-to-day classroom activity. What I tried to experiment during my short-period field work was some possible way to integrate assessment with learning activity. The feedback I received from the students and their own performance in classroom activities give me lot of satisfaction in my venture. But I am sure that a single shot of an activity like peer assessment or self assessment will not give enough skill and confidence to the students. If we use these strategies periodically and collectively, the students will gain expertise and confidence in assessing themselves and their peers.

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