

EFFECT OF FORMATIVE TESTING ON STUDENT'S ACHIEVEMENT IN HISTORY SUBJECT IN SECONDARY SCHOOL

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ABSTRACT:

Formative testing is an integral part of our education system. It is an integral part because it diagnosis student's difficulties in case of learning, evaluate teaching learning process. Whereas summative evaluation also helpful to give proper grading at the end of the course. Both this evaluation system has importance in our education system. Here researcher wanted to see the effect to formative evaluation. So some section of class xi given the formative evaluation with teaching and some section of class ix only summative evaluation conducted after the completion of teaching. After that teacher analysis the result.

Key word: Formative evaluation, Summative evaluation, Assessment.

INTRODUCTION:

Evaluation is an integral part of our education system. As our education system depends on three stages i.e selection of educational objectives, teaching learning experiences and evaluation. First we fixed the educational objectives, after that provide the best teaching learning experiences to fulfill that fixed objectives, after a while we evaluate that the fixed educational objectives achieve or not. To evaluate student's progress in a particular subjects there are several kind of process used, such as written examination, oral, observation, etc. Among them written examination has a great importance in our evaluation system. Written examination can apply both in case of formative evaluation and summative evaluation. Today formation evaluation becomes an integral part in case of evaluation. So, as in west Bengal unit test is a compulsory part for evaluation. If we continuously take examination after a certain gap, it seems that student will be overcome the fear of examination system. They do better result. Because the of examination phobia effect the students achievement in certain subjects.

Where as in case of summative evaluation, student's achievement measure before the end of their course. In that case student's performance measure on their one day preparation. But in one days preparation we cannot evaluate student's performance. So, if we take continuous evaluation throw out the year and judge student on the basis of their performance throw out the year that will be better to evaluate them.

That's why researcher here wanted to see the student's performance in case of continuously given formative evaluation and student's performance without given any formative evaluation.

Concept about Formative and Summative Assessments :

The terms “formative” and “summative” do not have to be difficult, yet the definitions have become confusing in the past few years. This is especially true for formative assessment. In a balanced assessment system, both summative and formative assessments are an integral part of information gathering.

Summative Assessments are given periodically to determine at a particular point in time what students know and do not know. Summative assessment in the classroom level is an accountability measure that is generally used as part of the grading process. Here are some examples of summative assessments which are introduced in our examination system are as follows:

- ✓ End-of-unit or chapter tests
- ✓ End-of-term or semester exams
- ✓ State level tests
- ✓ District level tests

Although the information gather from this type of assessment is important, it can only help in evaluating certain aspects of the learning process. Because they are spread out and occur after instruction every few weeks, months, or once a year, summative assessments are tools to help evaluate the effectiveness of programs, school improvement goals, alignment of curriculum, or student placement in specific programs.

Formative Assessment is part of the instructional process. When incorporated into classroom practice, it provides the information needed to adjust teaching and learning while they are happening. In this sense, formative assessment informs both teachers and students about student understanding at a point when timely adjustments can be made. These adjustments help to ensure students achieve targeted standards-based learning goals within a set time frame.

- **Defining the term Formative and Summative Assessment:** Scriven (1967) first utilized the terms *formative* and *summative* when writing about two possible purposes of evaluation. Bloom (1969) stated that the terms could also be applicable to teachers who specifically wanted to assess student progress toward a standard. Bloom (1971) soon introduced the foundation of assessment for learning (or formative assessment) in the *Mastery Learning* instructional model. Bloom’s *Mastery Learning* model stipulated that students would not progress to new concepts and objectives until they met, or mastered, previous ones. Popham (2008) advanced Bloom’s model with his own learning progression work. According to Popham, teachers should formatively assess students using groups of learning targets, called progressions, which built upon each other and culminated in a significant “target curricular aim”

(p. 24) .Forty-four years after Scriven (1967) first publicized the terms *formative* and *summative*, they were current buzzwords in education.

- Formative assessment is also called and described as assessment for learning (Assessment Reform Group, 1999; Stiggins, 2005). Formative assessment takes many forms, and thus answers to many differing definitions. Black et al. (2004) called it an assessment whose primary purpose was to aid in student learning. However, Popham (2011) described formative assessment as a process in which an assessment was but one component. The formative assessment process was one of measuring students' progress toward a benchmark, a standard, or a learning target, and collaboratively (with the student) deciding where to go next when the student met the objective, or when the student did not meet the objective. Summative assessment is also known and described as assessment of learning (Assessment Reform Group, 1999). Summative assessment is sometimes also best described as a traditional test for which a student is graded. It is a summation and measure of student learning.
- Sadler (1983) suggested that student learning increased when teachers made students part of the learning process. Teachers could do this by showing students how to self-assess. In other words, students would formatively assess their own work. Sadler said teachers had to show students models of proficiency so students would know the standards to which they aspired:

Teachers often shelter behind undefined criteria until students submit their work, and then provide rationalizations of evaluations and grades after papers are returned. In other words, there is often the temptation to see what the students have done first. It is then irresponsible to say to students.

Effective formative evaluation in class room: Popham and Stiggins (n.d.) asserted that descriptive formative feedback would engage students in learning and increase student affect toward the formative assessment process. They identified six specific strategies:

1. Provide student-friendly learning targets when introducing the lesson.
2. Accompany those targets with representative student work samples.
3. Provide continuous descriptive feedback – descriptive enough to let students know what to do next.
4. Teach self-assessment.
5. Help students improve by one component at a time in order to keep from overwhelming them.
6. Teach students ways of reflection. (n.p.)

OBJECTIVE OF THE STUDY:

The main objectives of the study is given below _____

- To study the student's achievement in case of formative evaluation.
- To study the student's achievement in case of summative evaluation.

- To study the importance of formative evaluation.
- To study the importance of summative evaluation.
- To study the difference in achievement test scores between formation evaluation and in case of only given summative evaluation.

SAMPLE: To conduct this research program me researcher took all girls student as the sample of his study. Here total sample is 79.

Table No: 1

Student of class ix- A	37
Student of class ix-B	42
Total No of student	79

TOOLS: A standardized achievement test was prepared on physical science according the class syllabus.

RELIABILITY: “Test re-test method ”used to estimate the reliability of the test.

VALIDITY: “Content validity” used to check the validity of the test.

STATEMENT OF HYPOTHESIS: For conduct the research program me researcher proposed two null hypothesis___

H_{01} : There is no significant difference between the achievement test score in case of summative evaluation and formative evaluation in history subject.

H_{02} :There is a no significant differences between the achievement test score in case of formative evaluation I and formative evaluation II in history subject.

ANALYSIS OF DATA:

Distribution of achievement test scores of the students in History subject in Formative Evaluation I of class ix A

TABLE-2

Class interval	Frequency
1-5	3
6-10	8
11-15	7
TOTAL	18

MEAN	9.11
MEDIAN	9.25
MODE	9
STANDARD DEVIATION	3.53
SKEWNESS	0.031

Distribution of achievement test scores of the students in History subject in Formative Evaluation II of class ix A

TABLE-3

Class interval	Frequency
1-5	2
6-10	8
11-15	10
TOTAL	20
MEAN	9.5
MEDIAN	9.5
MODE	9.5
STANDARD DEVIATION	1.66
SKEWNESS	0

Determination of the t value of the achievement test with Formative Evaluation I and Formative Evaluation II between 79 students

TABLE-4

Statistics	Achievement test with formative evaluation I	Achievement test formative evaluation II
No. of students	18	20
Mean values	9.11	9.5
Standard deviation (SD)	3.53	1.66
SD	2.71	
SD_E	0.88	
DIFFERENCE IN MEAN		
VALUE OF t	0.4431	

Insignificant at .05 level

Distribution of achievement test scores of standardized test of the students in History subject with given Formative Evaluation in class ix A

TABLE-5

Class interval	Frequency
1-5	10
6-10	7
11-15	10
16-20	10
TOTAL	37

MEAN	10.7
MEDIAN	11.25
MODE	13.44
STANDARD DEVIATION	5.76
SKEWNESS	0.475

Distribution of standardized achievement test scores of the students in History subject without given Formative Evaluation in class ix B

TABLE-6

Class interval	Frequency
1-5	18
6-10	14
11-15	7
16-20	3
TOTAL	42

MEAN	7.4
MEDIAN	6.57
MODE	6.9
STANDARD DEVIATION	31.86
SKEWNESS	0.016

TABLE-7

Determination of the t value of the achievement test with Formative Evaluation and without Formative Evaluation between 79 students

Statistics	Achievement test with formative evaluation	Achievement test without formative evaluation
No. of students	37	42
Mean values	10.7	7.4
Standard deviation (SD)	5.76	31.86
SD	27.58	
SDE	6.22	
DIFFERENCE IN MEAN	3.3	
VALUE OF t	0.53	

Insignificant at .05 level

FINDINGS:

From the above result, the researcher could draw some conclusion about the study that there is no significant relation between the formative evaluation and summative evaluation and there is no significant relation between formative evaluation I and formative evaluation II on achievement test of the student in History. Besides it is also remarkable that the researcher does not consider the other variables like, intelligence, classroom environment etc. in the study that might have influence on this research.

CONCLUSION:

As the study shows that there is no significant difference between formative and summative evaluation we can't conclude that formative evaluation does not have any importance. Formative evaluation its self has an importance .

It helps student to get mastery learning on that particular topic, Over Come the fear of examination ,learner can evaluate them selves, diagnostics learning difficulties, and use of appropriate teaching and learning method.

Study conducted very short duration of time. So if it is possible to conduct the study a long period there should be a effective results. Because the formative evaluation its self have and importance to achieve a mastery learning.

As the study conducted short period of time in class IX –A section's student attain a mastery level learning on that particular topic so they get good marks .where as in case of IX-B section, the teaching learning process done by the use to different teaching method which are necessary according to the topic. This way may be also helpful to the student to get good marks.

But the study shows as if we used different teaching method according to topic that helpful student to get good marks, and also they score better without any formative evaluation.

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