

The Effectiveness of Formative Assessment of English Writing Skill at Intermediate Level

Abstract:

This study is intended to gauge the viability of the effectiveness of formative assessment on English writing skills at the Intermediate level and was delimited to sixty students of a public sector degree college in Wazirabad. This study was design-based in nature, and formative assessment was given to learners for four months. After the completion of the intervention, it was found out that when students are provided with formative assessment during their studies, this method of assessment improves their learning process. After the completion of the intervention, it was discovered that when students are furnished with developmental evaluation during their investigations, this technique for appraisal improves their learning cycle. The result depicts that when student remained under continuous assessment process, it improved their English writing skill. Teachers should also provide formative assessment not only to the students by themselves but also enable them for self-assessment for the improvement in their learning.

Key Words:

Formative Assessment, Effectiveness, Writing Skills, Intermediate Level

Introduction

Learning is a complex and subjective process. During this process, not only students but also teachers have to be aware of the learning extent. Teachers should know about the amount of learning of their students and how this learning can be accelerated. In order to explore this aspect of learning, assessment is used as an effective tool. This study is experimental in nature; it is an attempt. It was made to know how formative assessment affects the students learning in general and writing skills in particular. Before discussing the effect of formative assessment, firstly, it is essential to know that what formative assessment is and what aspects of assessments are included in it.

[Black & William \(1998b\)](#) defined assessment in a broader sense; they included all the activities of students and teachers in it. According to them, these activities can be used to diagnose the problems of learning as well as teaching. And on the basis of this, changes can be made. So according to this definition, the assessment includes all those observations which teachers make all classroom discussions and all the analysis of students' work which include their homework and all their tests when this acquired information is used for making changes in teaching and learning accordingly as it becomes formative assessment in nature due to this information when teachers become aware of progress and troubles of their learners, they can use this information to change their teaching methodologies, instructional approaches and can provide students with more learning practices so that they can improve their learning.

[Black & William \(1998a\)](#) reviewed 250 journal articles and many chapters of different books about formative assessment to

know whether the formative assessment is effective or not on the basis of this research; they concluded that the results of that group of students on which formative assessment was applied were better than the result of that group of students on which formative assessment was not applied. The improvement of the result was ranged between 0.4 and 0.7 from the results; It was evident that formative assessment was not only helpful for

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normal students but also for low achieving students and the students having learning disabilities ([Black & William, 1998](#)).

Formative assessment in the form of feedback helps the learners find out those gaps which are present amongst their destination and present awareness, their comprehension and skills .and, as a result, guides the learner to take their necessary actions that are essential to obtain their goal (Ramaprasad, 1983; Sadler, 1998). When the feedback is given in the form of specific comments and specific suggestions about errors and their improvement on the students' tests and homework, it proves more helpful as compared to just write answers on their tests and homework (Bangret, Drowns, Kulick & Morgan, 1991; Elawer & Corno, 1985). This advice is mostly supportive of low achievers; about them, this is presumed that they lack innate ability learning. Formative assessment supports the notion that every child can learn to a high level. And in this way, it discourages that thinking due to which students showing low performance are discouraged, and their further learning is not given any importance (Ames, 1992; Vispoel & Austin, 1995).

Although feedback that is synonymous with formative assessment is generally given by the teacher, however, the learner can also perform a significant role in formative assessment when he evaluates himself .it is evident from the results of two experimental research studies, in which two groups of students were provided with different status. The group of students who were given information about their learning objectives, their assessment criteria and the chances of self-evaluation show greater achievement as compared to the group which was not given the same opportunity ([Fontana & Fernandes, 1994](#); Frederikson & White, 1997). The results of another study also strengthen this belief that even the students with learning disabilities also show improvement in their performance when they are given knowledge about the use of self-monitoring strategy while doing their reading and writing tasks (Mccurdy & Shaprino, 1992; Sawyer, Graham & Harris, 1992).

The results that have been derived from the comprehensive evaluation of investigation by [Black & William \(2003\)](#). have changed the concept of assessment that is being used today. The deductions on the basis of their work are largely responsible for that kind of assessment that is called "formative assessment" and is being used today in this world of education. The results of their research review (1998) included all those studies which were conducted throughout the world, from Kindergarteners to college students, including all subject areas such as reading, writing, social studies, mathematics, and science. The results of their study are the largest found for any educational interventions. The results of the students whose teachers were using formative assessment were showing effective size between 0.4 and 0.7. in other words, it can be said that the achievement gains of students on which formative assessment strategy was used can rank in 15 to 25 percentile levels, or two to four-position parallels on generally used standardized completion test score scale. It could be said that the rank of the United States could be moved from the middle to the peak of 42 nations (that were established) to the top five countries if the formative assessment applied ([Black & William, 1998](#)).

When the formative assessment was used in the case of low-performing students, it also proved useful. It increased not only their learning, but in some cases, their achievement reached to the point of high-achieving students, that was an additional and excessive-quality of formative assessment, so Black & William pointed out that the studies in which formative assessment was involved mostly showed learning gains ([Black & William, 1998](#)). On the basis of results reported by Black and William and some other researchers, many programmes and products have been developed. This term of formative assessment is excessively being used in the tests and items developed for business purpose, short-term and level tests, short-cycle assessment for a classroom. Now the question is that all the products, tests and practices which are being sold and are used with the label of formative assessment are really formative in their true sense! how formative assessment gains its power? How the results of these studies reveal the facts about the process of learning, and how these results could be used?

According to Black & William and various other specialists of education, the formative assessment is not a single tool only. It consists of a combination of practices. These practices involve some certain actions which result in learning gains and improvement. Many educationists highlight this fact when they define the process

of assessment for learning. Formative assessment, therefore, is essential feedback (Ramaprasad, 1983) both for teachers and pupil about present understanding and skill development in order to determine the way forward (Harlen & James, 1997). It refers to an assessment that is precisely anticipated to give advice on performance to increase and speed up learning (Sadler, 1998). Furthermore, an assessment is formative to the extent that information from the assessment is feedback within the system and actually used to improve the performance of the system in some way (William & Leahy, 2007). Formative assessment is defined as a process carried out during the teaching for the purpose of improving teaching or learning; what makes assessment formative is that it is immediately used to make adjustments so as to produce new learning (Shepard, 2008). From the researches, articles and books, it is clear that all these sources say /depict one common thing that it is a process, not a tool. In this procedure, teachers and students both gather evidence through all possible means which may be formal or informal, in order to improve learning. So it is advised that before applying any action, or test or activity which is apparently labelled as formative assessment, it should be reviewed properly that either it is formative in its true sense or not?

How Formative Assessment Gets its Power?

When we observe the collected studies of William and Black (1998,1998), we can get a large collection of those practices which were used as interventions and resulted in remarkable achievement gains. One thing that can be noticed in all these studies is the presence of some common features .some of these common features are as under.

- Most of the teachers used classroom discussions, tests, and homework and classroom task to get information about students learning and understanding. After getting the information, they took the necessary actions to improve students learning and correct their misunderstandings.
 - They also provided feedback in descriptive forms, in which guidance was also included. This guidance was about improvement during learning.
 - From these studies, it was also clear that most of the teachers using formative assessment strategy tried to develop the skill of self-assessment and peer-assessment in their students.
- From the analysis of these studies, Black and William drew some key features of formative assessment. These features are as under
- “Opportunities for students to express their understandings should be designed into any piece of teaching, for this will initiate the interaction through which formative assessment aids learning” (p.143).
 - “The dialogue between pupils and teachers should be thoughtful, reflective, focused to evoke and explore understanding, and conducted so that all pupil has an opportunity to think and express their ideas” (p.144).
 - “Feedback to any pupil should be about the particular qualities of his or her work, with advice on what he or she can do to improve, and should avoid comparison with another pupil” (p.143).
 - “Feedback on the test, seatwork and homework should give each pupil guidance on how to improve, and each pupil must be given help and an opportunity to work on the improvement” (p.144).
 - “If formative assessment is to be productive, the pupil should be trained in self-assessment so that they can understand the main purposes of their learning and thereby grasp what they need to do to achieve” (p.143).

So from these recommendations of Black and William, it is clear that formative assessment is a powerful tool in the hand of teachers and students both. With the help of it, the teacher can also get feedback about his teaching and the effectiveness of his instructional methodology. On the basis of this feedback, he can take spontaneous decisions about the change in actions to make his students learning better while students on the

basis of formative assessment have a greater ability to assess their own learning and to assess their peer abilities.

Uses of Formative Assessment for Teachers

Many strategies which are used in formative assessment generally related to teacher's information requirements, and as a result, they can get the answers to some important questions for their teaching, such as

- Who is unable to understand the lesson?
- What misconceptions of students do I need to clear?
- What are the student's strengths needed to use
- What type of feedback is required for students?
- What changes should I make in his/ her teaching?
- How should I make groups of students?
- What diversity do I need to formulate?

When teachers act on the evidence that is gathered during the process of formative assessment, the learning of students can be increased. Questioning and Dialogues these two techniques play a very important role in the process of assessment for learning. And the success of formative assessment is mostly attributed to these two techniques. In other words, it can be said that the success of the formative assessment process mostly depends on these two techniques. There are many programs and practices that help the teachers to obtain information about students achievements, interpret this information and then decide the suitable action for improving their learning; while making decisions, teachers mostly focus on getting information regarding developing short-term assessment, students reaction to intervention (improvement strategy), separated instruction, continuous assessment and questioning techniques.

Use of Formative Assessment for Students

A research review by [Black and William \(1998\)](#) shows that the student as a decision-maker for the use of assessment and involvement of students in the assessment process proves beneficial for them. Sadler (1989) agreed that formative assessment helps the student to develop their ability of self-assessment during their work. The fundamental condition for a student's self-assessment is that the student, firstly, learns the concept of quality that is almost similar to the concept of his teacher's concept .and during the process of production, he observes this concept of quality throughout the process. He tries to match his work with that "quality concept". During this process, he also has some other alternative strategies which he can use at any point of his learning and self-assessing process. From the work of Sadler, which he did about formative assessment in the science classroom, some educationists such as Atkin, Black & Coffey (2001) have raised three questions: about the procedures by which the assessment message is generated, it would be a mistake to regard the student as the passive recipient of a call to action ([Black & William,1998](#)). These three questions guided for following goals

1. Recognition and communication about the learning and performance goal.
2. Enable the students to assess their current level of understanding by themselves.
3. To make aware students of strategies and skills reach the goal.

The above guiding questions/objective of Sadler provided a framework of assessment for learning. So The practices of _formative assessment are designed to fulfil the students' knowledge needs to maximize both motivation and achievement by involving students from the start in their own learning ([Stiggins, Arter, Chappuis & Chappuis, 2004](#)).

The Hypothesis of the Study

There is no effect of formative assessment on student's writing skills at the intermediate level.

Procedure

This study was aimed at documenting the effectiveness of formative assessment on the English writing skill of students at the intermediate level. In order to evaluate the effectiveness were taken as a sample. They were provided with formative assessment in the form of oral feedback to a group of 60 students of 1st-year intermediate level along with written feedback. Students were given those prompts of creative writing, which were developed by the researcher according to the "National Curriculum for English Language, Grades 1-X11". Those prompts covered the four types of creative writing i-e descriptive writing, narrative writing, explorative writing and analytic writing. These prompts were given to the students in the form of a pair. In the first week, the prompt was given to the students. They were asked to write about it. When the written work of students was evaluated, they were given feedback. They were given instructions and advice on how they could remove their mistakes and could improve their English writing. In the classroom, they are given examples on the whiteboard. At first, their mistakes were discussed collectively and then individually. Every day ten student's work was evaluated and discussed in class, and at the end of the session, they were given oral and written feedback on the written word. Along with this feedback, students were also assigned homework related to that kind of creative writing that was given to them in the form of prompts. After one week of practice, they were given the same prompt in the next week. This process continued for twenty-four weeks. Total twenty-four prompts were given to the students in the form of a pair. After these twenty observations, all the written work of students' were quantified with the help of those rubrics that were developed especially for the measurement of students' creative writing. Students' written work was assigned marks with the help of these rubrics. After assigning marks, data were evaluated with the help of SPSS. The graph was plotted by taking the values of observation along the x-axis and the marks of students along the Y-axis. The curve of the graph was showing a gradual progression. It depicts that formative assessment was working and students writing skill was improving with formative assessment.

Collection of Data

According to the pattern of designed base experimental research, a group of 60 students was taught for twenty-four weeks. For the first two weeks, students were taught different types of creative writing. After two weeks, they were given different prompts of creative writing at different period of time. After giving every prompt, students written work was checked, and they were provided with formative assessment. After the formative assessment, the same prompt which was already given to the students was given again to them to check the effects of formative assessment.

Table 1. Students' Tests Scores of Students during Formative Assessment 12/24

S.No	Ass.1	Ass.2	Ass.3	Ass.4	Ass.5	Ass.6	Ass.7	Ass.8	Ass.9	Ass.10	Ass. 11	Ass.12
Id 1	3	3	4	4	5	5	6	7	7	7	8	8
id 2	4	4	4	5	5	5	6	7	7	7	7	8
Id 3	3	4	4	5	5	5	6	6	6	6	7	8
Id 4	4	4	5	5	5	5	6	6	6	6	7	8
Id 5	3	3	4	4	5	5	6	6	6	6	7	7
Id 6	3	3	4	4	5	5	6	7	7	7	7	8
Id 7	4	4	5	5	6	6	6	6	6	6	7	7
Id 8	3	4	5	5	5	6	6	6	6	6	7	7
Id 9	3	3	4	4	5	6	6	7	7	7	7	8
Id 10	3	3	4	4	5	6	6	7	7	7	7	7
Id 11	4	4	4	5	5	6	6	7	7	7	7	7

S.No	Ass.1	Ass.2	Ass.3	Ass.4	Ass.5	Ass.6	Ass.7	Ass.8	Ass.9	Ass.10	Ass. 11	Ass.12
Id 12	3	4	4	5	5	6	6	7	7	7	7	8
Id 13	4	4	5	5	5	5	6	7	7	7	7	7
Id 14	3	4	4	5	6	6	6	7	7	7	7	7
Id 15	4	4	5	5	6	6	6	7	7	8	8	8
Id 16	4	4	5	5	6	6	6	6	7	8	8	8
Id 17	4	4	5	5	6	6	6	6	7	8	8	8
Id 18	4	4	5	5	6	6	6	6	7	8	8	8
Id 19	4	4	5	5	6	6	6	6	7	7	7	8
Id 20	3	4	4	4	5	6	6	7	7	8	8	8
Id 21	3	4	4	5	5	6	6	7	7	7	7	8
Id 22	4	4	4	5	5	6	6	7	7	8	8	9
Id 23	4	4	5	5	6	6	6	7	7	7	7	8
Id 24	4	4	5	5	6	6	6	7	7	7	7	8
Id 25	4	4	5	5	6	6	6	7	7	7	8	8
Id 26	3	3	4	4	5	6	6	7	7	7	8	8
Id27	3	4	4	5	5	5	6	7	7	8	8	8
Id 28	4	4	5	5	6	6	6	7	7	8	8	9
Id 29	4	4	5	5	6	6	6	7	7	8	8	9
Id 30	3	3	4	4	5	5	6	7	7	7	8	8
Id 31	4	4	5	5	6	6	6	7	7	8	8	8
Id 32	3	4	4	5	5	5	6	7	7	7	7	8
Id 33	4	4	5	5	6	6	6	7	7	8	8	8
Id 34	3	4	4	4	5	5	6	7	7	7	7	8
Id35	4	4	5	5	6	6	6	7	7	8	8	9
Id 36	3	4	4	4	5	5	6	6	6	7	7	9
Id 37	4	4	5	5	6	6	6	6	6	7	7	8
Id 38	4	4	5	5	6	6	6	6	6	7	7	8
Id 39	4	4	5	5	6	6	6	6	6	7	7	8
Id 40	4	4	5	5	6	6	6	6	6	7	7	8
Id 41	4	4	5	5	6	6	6	6	7	7	7	8
Id 42	4	4	5	5	6	6	6	7	7	7	7	8
Id 43	4	4	5	5	6	6	6	7	7	7	7	8
Id44	4	4	5	5	6	6	6	7	7	7	7	8
Id45	3	4	4	4	5	6	6	7	7	7	7	8
Id46	4	4	5	5	6	6	6	7	7	7	7	8
Id47	3	4	4	4	5	6	7	7	7	7	7	8
Id48	4	4	5	5	6	6	7	7	7	7	7	8
Id49	3	3	4	4	5	5	6	7	7	7	7	8
Id50	4	4	5	5	6	6	6	7	7	7	7	8
Id51	3	3	4	4	5	6	6	7	7	8	8	8
Id52	3	3	4	4	5	5	6	7	7	8	8	8
Id53	4	4	5	5	5	5	6	7	7	8	8	8
Id54	4	4	5	5	5	5	6	7	7	8	8	8
Id55	4	4	5	5	5	5	6	7	7	8	8	8
Id56	4	4	5	5	5	5	6	7	7	8	8	8
Id57	3	3	4	4	5	5	6	6	6	7	7	8
Id58	3	4	4	4	5	5	6	6	6	7	7	8
Id59	4	4	5	5	6	6	6	7	7	7	7	8
Id60	4	4	5	5	6	6	6	7	7	7	8	8

Table 2. Students' Tests SCORES of students during Formative Assessment12/24

S. No	Ass. 13	Ass. 14	Ass. 15	Ass. 16	Ass. 17	Ass. 18	Ass. 19	Ass. 20	Ass. 21	Ass. 22	Ass. 23	Ass. 24
Id 1	8	9	9	9	9	9	9	9	10	10	11	11
id 2	8	8	8	8	9	9	9	9	10	10	11	11
Id 3	8	8	9	9	9	9	9	9	10	10	11	11
Id 4	8	8	9	9	9	9	9	9	10	10	11	11
Id 5	8	9	9	9	9	10	10	10	11	11	12	12
Id 6	8	8	8	9	9	9	9	9	10	10	11	12
Id 7	8	8	8	8	9	9	9	9	10	10	11	12
Id 8	8	8	8	8	9	9	9	9	10	10	11	12
Id 9	8	9	9	9	9	10	10	11	11	11	12	12
Id 10	8	8	9	9	9	10	10	10	10	11	11	12
Id 11	8	9	9	9	9	10	10	11	11	11	12	12
Id 12	8	8	8	9	9	9	10	11	11	11	12	12
Id 13	8	8	9	9	9	10	10	10	10	11	11	12
Id 14	8	9	9	9	9	10	10	10	11	11	12	12
Id 15	8	9	9	9	9	10	10	10	11	11	11	11
Id 16	8	8	8	8	8	9	10	10	10	10	11	11
Id 17	8	9	9	9	9	9	10	10	10	10	11	11
Id 18	8	8	8	9	9	9	10	10	10	11	11	11
Id 19	8	8	9	9	9	9	9	9	10	10	11	11
Id 20	8	9	9	9	9	10	10	10	11	11	11	11
Id 21	8	8	8	9	9	9	9	10	10	10	11	11
Id 22	9	9	9	9	9	9	9	10	10	10	10	11
Id 23	8	8	8	9	9	9	9	10	10	10	11	11
Id 24	8	8	8	9	9	9	9	10	10	10	10	11
Id 25	8	9	9	9	9	9	10	10	10	11	11	12
Id 26	8	8	8	8	9	10	10	10	11	11	11	12
Id27	8	9	9	9	9	9	9	10	10	11	11	12
Id 28	9	9	9	9	9	10	10	10	11	11	11	12
Id 29	9	9	9	9	9	10	10	11	11	11	11	12
Id 30	8	8	8	9	9	9	9	10	10	10	11	11
Id 31	8	8	8	9	9	9	9	10	10	10	11	11
Id 32	8	8	8	9	9	9	9	10	10	10	11	11
Id 33	8	9	9	9	9	9	9	10	10	10	11	11
Id 34	8	8	9	9	9	9	9	10	10	10	11	11
Id35	9	9	9	9	9	10	10	10	11	11	11	12
Id 36	9	9	9	9	9	10	10	10	11	11	11	12
Id 37	8	8	8	9	9	9	9	10	10	11	11	12
Id 38	8	9	9	9	9	10	10	10	11	11	11	12
Id 39	8	8	8	9	9	9	9	10	10	11	11	12
Id 40	8	9	9	9	9	10	10	10	11	11	11	12
Id 41	8	9	9	9	9	10	10	11	11	11	11	12
Id 42	8	8	8	9	9	9	9	10	10	10	11	12
Id 43	8	9	9	9	9	10	10	10	11	11	11	12
Id44	8	9	9	9	9	9	9	10	10	11	11	12
Id45	8	9	9	9	9	10	10	10	11	11	11	12

S. No	Ass. 13	Ass. 14	Ass. 15	Ass. 16	Ass. 17	Ass. 18	Ass. 19	Ass. 20	Ass. 21	Ass. 22	Ass. 23	Ass. 24
Id46	8	9	9	9	9	10	10	10	11	11	11	12
Id47	8	8	8	9	9	9	9	10	10	10	11	12
Id48	8	8	8	9	9	9	9	10	10	10	11	12
Id49	8	8	8	9	9	9	9	10	10	10	11	12
Id50	8	8	8	9	9	9	9	10	10	10	11	12
Id51	8	8	8	9	9	9	9	10	10	11	11	12
Id52	8	9	9	9	9	9	9	10	10	11	11	12
Id53	8	9	9	9	9	9	10	10	10	11	11	12
Id54	8	8	8	8	9	9	10	10	11	11	11	12
Id55	8	9	9	9	9	10	10	10	11	11	11	12
Id56	9	9	9	9	9	10	10	10	11	11	11	12
Id57	9	9	9	9	9	10	10	10	11	11	11	12
Id58	9	9	9	9	9	10	10	10	11	11	11	12
Id59	9	9	9	9	9	10	10	10	11	11	11	12
Id0	8	9	9	9	9	10	10	10	11	11	12	12

Table 3. Average Values of 24 Students' Test Scores During Formative Assessment

Number of tests	The average value of marks
1	3.6
2	3.81
3	4.56
4	4.71
5	5.46
6	5.66
7	6.03
8	6.17
9	6.8
10	7.21
11	7.56
12	8.16
13	8.36
14	8.75
15	8.86
16	9.16
17	9.26
18	9.71
19	9.83
20	10.28
21	10.76
22	10.96
23	11.45
24	12.08

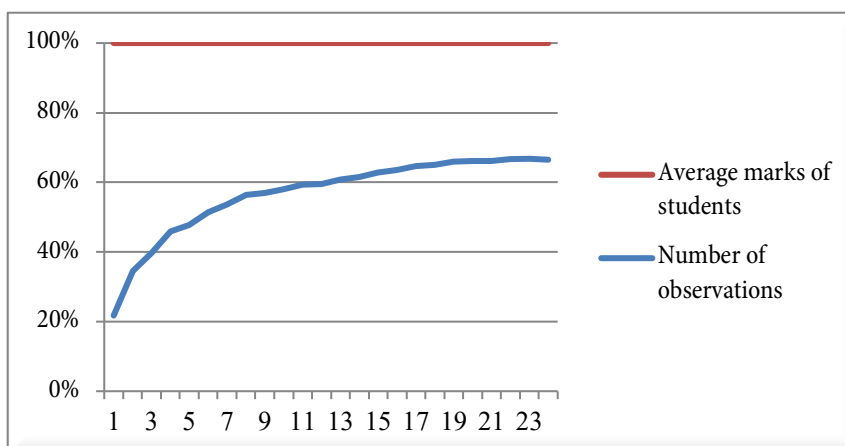


Figure 1: Shows the Number of Observations and Average marks of Students in those Observations

Findings

Following are the findings of those observations which were taken before and after formative assessment.

1. The mean of the first observation before the formative assessment is 3.6 before the formative assessment, while the mean of the same prompt after the formative assessment is 3.81.

The difference between these two values shows that formative assessment proves helpful for improving students writing skill.

2. The mean of the second pair/set of observation is 4.56 before the formative assessment, while the mean for the same prompt after the formative assessment is 4.71.

The difference between these two values is the result of that formative assessment that was provided to the students.

3. The mean of the third pair/set of observation is 5.46 before the formative assessment, and the mean value for the same prompt after the formative assessment is 5.66.
4. The mean value of the fourth pair of observation before the formative assessment is 6.03, and after the formative assessment is 6.17. this increase in mean value is the result of the formative assessment.
5. The mean value of the fifth pair of observation is 6.8 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 7.21.
6. The mean value of the sixth pair of observation is 7.56 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 8.16.
7. The mean value of the seventh pair of observation is 8.36 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 8.75.
8. The mean value of the eighth pair of observation is 8.86 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 9.16.
9. The mean value of a ninth pair of observation is 9.26 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 9.71.
10. The mean value of the tenth pair of observation is 9.83 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 10.28.
11. The mean value of the eleventh pair of observation is 10.76 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 10.96.
12. The mean value of the twelfth pair of observation is 11.45 before the formative assessment, .while the second mean value of the same prompt after the formative assessment is 12.08.

Discussion

This study was aimed to investigate the effectiveness of formative assessment on the English writing skill of students at an intermediate level. Many studies and research works were studied for this purpose. From the study of that research work, one thing was evident that in the past, most of the people and researchers were confused about the clear and solid definition of formative assessment. They defined this term with respect to its uses. They were not clear that what a clear definition of formative assessment is.

Formative assessment is being used at a large scale nowadays, but what is the clear concept of formative assessment? It is not defined. The definition of this term becomes difficult because of its complexity. Most of the time, this term is defined in the context of its uses. Due to the lack of this clarity, it becomes difficult to say that a formative assessment is being used or not. But one thing is clear that in spite of this vagueness, formative assessment is being used at a large scale, as cited by [Black and William \(1998\)](#) and Leung and Mohan (2004).

Conclusion

After analysis of the data, it was concluded that

1. In the first observations, all values of the mean are lower as compared to the all mean values of observations after a formative assessment
2. This difference in values is the result of that formative assessment that was provided to the students.
3. It is also evident that the mean value of the first pair of observation is smaller as compared to the next mean values of the second pair, similarly mean values of the second pair of observations is smaller as compared to the mean values of the third pair of observations.
4. The same increase in the mean values of the third, fourth and fifth pair of observations can be seen.
5. The same increase in the mean values of the third, fourth and fifth pair of observations can be seen.

Recommendation

1. It is suggested that the teachers should encourage the students, develop confidence in them and give proper feedback on their works.
2. Teachers should use different teaching methods and formative assessment for enhancing the learning environment in the class.
3. Teachers should use different A.V aids in their classes to make the learning of students easier.
4. Teachers should do a continuous assessment. Through this continuous assessment, they will be able to bring more and more improvement in the learning skills of students.
5. Teachers should develop the ability of self-assessment in their students. So that they could not only point out their own mistakes but also could correct them.
6. When the teachers come into their classes, they should try to connect the present-day lesson with the previous information of students so that they could connect in their minds the new information with the previous that was present in their mind already.

References

- Bell, B., & Cowie, B. (2000). The characteristics of formative assessment in science education. *Science Education*, 85, 536–553.
- Bergan, J. R., Sladeczek, I. E., Schwarz, R. D., & Smith, A. N. (1991). Effects of a measurement and planning system on kindergartners' cognitive development and educational programming. *American Educational Research Journal*, 28, 683-714.
- Black, P., & William, D. (2003). 'In praise of educational research': Formative assessment. *British Educational Research Journal*, 29(5), 623-637.
- Black, P., & William, D. (1998). Assessment and classroom learning. *Assessment in education*, 5(1), 7-74.
- Bloom, B. S. (1969). Some theoretical issues relating to educational evaluation. In R. W. Taylor (Ed.), *Educational evaluation: New roles, new means: The 68th yearbook of the National Society for the Study of Evaluation, Part II* (pp. 26-50). Chicago: *University of Chicago Press*.
- Buchanan, T. (2000). The efficacy of a World-Wide Web mediated formative assessment. *Journal of Computer Assisted Learning*, 16, 193-200.
- Butler, R. (1988). Enhancing and undermining intrinsic motivation; the effects of task-involving and ego-involving evaluation on interest and performance. *British Journal of Educational Psychology*, 58, 1-14.
- Chappuis, S., & Stiggins, R. J. (2002). Classroom assessment for learning. *Educational Leadership*, 60(1), 40-43.
- Fontana, D., & Fernandes, M. (1994). Improvements in mathematics performance as a consequence of self-assessment in Portuguese primary school pupils. *British Journal of Educational Psychology*, 64, 407-417.
- Frederiksen, J. R., & White, B. J. (1997). Reflective assessment of students' research within an inquiry-based middle school science curriculum. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Fuch, L. S., & Fuch, D. (1986). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children*, 53, 199-208.
- Henly, D. C. (2003). Use of Web-based formative assessment to support student learning in a metabolism/nutrition unit. *European Journal of Dental Education*, 7, 116-122.
- Leung, C., & Mohan, B. (2004). Teacher formative assessment and talk in classroom contexts: Assessment as discourse and assessment of discourse. *Language Testing*, 21(3), 335-359.
- Martinez, J. G. R., & Martinez, N. C. (1992). Re-examining repeated testing and teacher effects in a remedial mathematics course. *British Journal of Educational Psychology*, 62, 356-363.
- Melmer, R., Burmaster, E., & James, T. K. (2008). Attributes of effective formative assessment. Washington, DC: Council of Chief State School Officers. October 7, 2008, <http://www.ccsso.org/publications/details.cfm?PublicationID=362>
- Perie, M., Marion, S., & Gong, B. (2007). The role of interim assessments in a comprehensive assessment system: A policy brief. October 1, 2008 <http://www.nciea.org/publications/PolicyBriefFINAL.pdf>
- Popham, W. J. (2008). Transformative assessment. Alexandria, VA: Association for Supervision and Curriculum Development.
- Popham, W. J. (October 2006). Defining and enhancing formative assessment. Paper presented at the Annual Large-Scale Assessment Conference, Council of Chief State School Officers, San Francisco, CA.
- Ross, J. A. (2006). The reliability, validity, and utility of self-assessment. *Practical assessment, Research and Evaluation*, 11(10). January 31, 2009 <http://pareonline.net/getvn.asp?v=11&n=10>
- Ruiz-Primo, M. A., & Furtak, E. M. (2006). Informal formative assessment and scientific inquiry: Exploring teachers' practices and student learning. *Educational Assessment*, 11, 205-235.
- Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, 33, 359-382.

- Scriven, M. (1967). The methodology of evaluation. In R. W. Tyler, R. M. Gagne, and M. Scriven (Eds.), *Perspectives of curriculum evaluation, Volume I* (pp. 39-83). Chicago, IL: Rand McNally.
- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational researcher*, 29(7), 4-14.
- Sly, L. (1999). Practice tests as formative assessment improve student performance on computer-managed learning assessments. *Assessment and Evaluation in Higher Education*, 24(3), 339-343.
- Stiggins, R. J. (2002). Assessment Crisis: The absence of assessment FOR learning. *Phi Delta Kappan*, 83(10), 758-765.
- Stiggins, R. J. (2005). From formative assessment to assessment FOR learning: A path to success in standards-based schools. *Phi Delta Kappan*, 87(4). February 1, 2009
http://www.pdkintl.org/kappan/k_v87/k0512sti.htm
- Thompson, M., Paek, P., Goe, L., & Ponte, E. (2004). Study of the California formative assessment and support system for teachers: Relationship of BTSA/CFASST and student achievement. Princeton, NJ: Educational Testing Service.
- Velan, G. M., Rakesh, K. K., Mark, D., & Wakefield, D. (2002). Web-based self-assessments in Pathology with Questionmark Perception.