

Formative Assessment as a Pedagogical Tool: Leveraging Feedback in Higher Education Classrooms

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Abstract

Formative assessment, by collecting and analysing evidence and then taking action, provides a way to make teaching more effective and helps students learn in a deeper and longer-lasting way. This study explores the use of formative feedback to support learning in a B.Ed. classroom, emphasising the value of scaffolding, oral, and descriptive feedback. The aim was to gain an in-depth understanding of how formative feedback influences student learning. This study is a descriptive observational study. The researcher observed how immediate feedback impacted student learning during classroom activities through - Non-Participatory Observation method. Findings of the study revealed insights into the teaching-learning process, the role of formative assessment and feedback, and demonstrated clear improvements in student learning through the application of feedback as a learning tool.

Keywords: Formative Assessment, formative feedback, teaching, learning, classroom

Introduction

The concept of assessment has existed for centuries. However, the concept of assessment being utilized for purposes other than just ranking or grading a student's work or performance, such as enhancing learning, has recently gained significant attention in research and professional

development. The word ‘assessment’ has been derived from the Latin word ‘assidere’, which means to ‘sit beside.’ Which can be taken to imply a proximity or association between the assessor and the learner in the assessment process (Good 2011, as cited in Boyle & Charles, 2017)

Formative assessment is a continuous process and a part of everyday practice by teacher, pupil and peers. According to William and Thompson (2008) Formative assessment is an integral part of teaching and learning. It is a process of providing information to students about their performances. It may be transmitted formally or informally by any time of the academic year. It is carried out to know the learning progress, skill acquisition and needs of an individual. It is a way of diagnosing the lacunas of learners and finding out ways of improvement. It is done not only to fix the problems of students but to improve their learning and turn their weaknesses into their strengths.

Understanding Formative Assessment and Formative Feedback

Despite there being so many myths and theories over hyping Formative assessment, it is a simple method, As Philippe Perrenoud defined ‘Any assessment that helps a pupil to learn and develop is formative’ (1991,p.80, as cited in Boyle & Charles, 2017).

According to Dylan William in his classroom experiment reference, he observed, stating that “*Assessment for learning is something which is done day by day or minute by minute adjustment of your teaching according to students and such assessment becomes Formative assessment when the evidence is actually used to adapt the teaching work to meet learning needs.*”

Further formative feedback is an essential part of formative assessment. Formative Assessment and formative feedback go hand in hand and are equally important for the students' learning. Formative feedback is an ongoing process with the formative assessment with the

opportunity to promote and measure student knowledge and skills. It helps students to understand their scope of improvement so that they can improve their learning and also allows teachers to understand the progress and problem of students so that a teacher can further adjust in his/ her teaching as per the needs of the students.

(Black and William 1998a) holds that the active participation of student-teachers in a classroom can help to uplift the educational level and, in the process, formative assessment is an important tool for improving learning. Therefore, it should be brought into the practice in real classrooms also and not just in the policies, for that mindset must be changed and one should think out of the box instead of just following the traditional methods.

In the field of education, feedback is information given to students to improve their learning. It can be given by a teacher to a student, student to student, or student to teacher, and one can also give feedback to oneself. The purpose of providing feedback is to assist learners in attaining their predetermined learning objectives. Effective execution of feedback can be compelling. Nevertheless, feedback might have negative consequences if it fails to yield the intended result or conclusion. Now, the question that comes to mind is how it can be a positive or constructive feedback, Feedback that enhances the process of learning. The reviewed study has found that teachers find it relatively simple to give their pupils positive, reinforcing feedback, but they struggle to provide them with critical feedback (positive criticism). Delivering students with essential feedback can pose difficulties, but it is crucial to provide feedback that focuses not just on commonalities, but specifically on the areas that need improvement and the areas where they excel. To comprehend formative assessment, it is crucial for both learners and teachers to actively engage and proactively seek to understand this process, so that they can collaboratively enhance the learning experience. To enhance the learning process, the teacher needs to comprehend the challenges and advancements of the students. The process does not occur

rapidly; rather, it unfolds gradually via hard work and consistent practice.

Multiple types of feedback can be implemented in a classroom, such as scaffolded feedback and timely feedback. Descriptive feedback, oral feedback, peer feedback, and self-feedback are several types of feedback.

This research intends to investigate the extent to which assessment procedures in higher education effectively support students' learning. The study specifically focuses on understanding how feedback has evolved and been adapted to enhance students' learning outcomes in a classroom setting. Effective assessment for purposes of learning encourages the active involvement of students.

Forms of Feedback

Scaffolded Feedback

One of the ways students can be helped to enhance their learning is through scaffolding them. Sometimes giving clues to the students that would embark them to think to evoke their learned response. Learning done in this way is retained for a longer time.

Example:

Teacher: *What didn't you understand?*

Student: *I just didn't get it.*

Teacher: *Ok! Solve the first part as the previous problem then multiply this variable. See if you can get the answer this way. I will come back in a few minutes.*

Here the response of the student “I can’t do any of it” is the reaction out of anxiety about the changing nature of the task. An immediate clue can help the student. The teacher may say begin solving like the previous one and then add a new variable. I will come back in a few

minutes. This gives space to the student to engage with the problem actively, make sense of it, and reach the solution. The teacher may verify its correctness later.

In another example, an art teacher had sketched a face in front of the class and shared the criteria for drawing a well-aligned face. He said, “Eyes should be drawn half down the face. The distance between two eyes should be nearly the width of an eye”. Such feedback will communicate to the student what is to be given attention and still a lot to be done by them. Well! scaffolding becomes essential at the primary level where kids are unable to take the task independently.

Oral and Written Feedback

A question that often-perturbed teachers is whether oral or written feedback is more effective. Boulet, Simard & Melo (1990) in their classroom experiment found the question of the feedback given orally or written was less important than the fact that the group of students was given enough time to apply the feedback to improve the work.

The question of Quantity of feedback?

Students expect a certain amount of feedback. It is discouraging for them to put so much time and effort into a piece of work and receive only a small amount of written feedback. Lunsford (1997) suggests that there should be at least three well thoughts- out comments per assignment. In addition, this feedback should be an expression of how the reader has experienced the essay rather than offering judgmental comments.

Timeliness

Cowan (2003) strongly suggests that feedback oral or written must be provided in minutes to be most effective. Keeping this in consideration, the sooner the student gets feedback

the better it is. That is why they should get it while the topic is still fresh in their minds.

Therefore, the teacher must take care to-

- Return the assignment the next day
- A regular oral and written response on the student report

Description

Feedback given by the teacher must be in a clear affirmative sentence rather than making use of ambiguous or sarcastic comments. Often teachers provide feedback that is accurate but ambiguous. For example, '*confused*', '*adequate*', '*excellent*', '*poor*', '*be careful how you begin the sentence*'. They are accurate but unhelpful. These remarks which often teachers think to be feedback are accurate but unhelpful because they don't state what is causing confusion or why something is good. Similarly, being too sarcastic undermines the students' confidence as, "did you experiment to find all these", "most of this is straight from the book". Other unhelpful issues are spelling and grammar while ignoring the most important aspects such as conceptual understanding as critical analysis.

Peer Assessment

When students are encouraged to assess each other's work, it becomes easier for the teacher to engage in formative activities with the student. Evaluating one another's work helps the students to understand the assessment criteria and thereby their development of skill for self-assessment. A successful peer session involves the learner to think 'like a teacher' then the learner will explain to the other one how to improve his/her work. In doing so both develop an understanding of what successful work looks like. Peer assessment is also an effective strategy to encourage dialogue by asking for jurisdiction and even putting forward alternative solutions. Its culture, social skills and thinking critically.

Discussion and Dialogue on Feedback

For students to be benefitted from formative assessment and formative feedback they must get the opportunity to express and communicate their understanding about the feedback they have received. This can be done by encouraging discourse around formative assessment activities such as reading aloud an essay, presentation by students, engaging students in task viva-voce, etc. Discussion is also important for developing a learning culture of open discussion and acceptance of critical comments from teachers and peers. Dialogue is also very important for building multiple perspectives towards an event and overcoming obsession for one correct answer.

Research Question

The primary focus of my study has been on

1. How does formative assessment enhance everyday student learning through the feedback provided by each other?
2. How can formative feedback practices be embedded in a classroom setting?

Methodology

This research is a descriptive observational study. The classroom has been observed over the lessons during the study. Discussion with the teacher on preparing Lesson plans considering the learning needs of the students and observing the class while imparting those lesson plans in the classroom gave rich information during the study. The data was collected through non participatory observation. 15 students were randomly selected from the classroom, and they have been observed in classes on the ongoing course 'Assessment for Learning'. There, Three Lesson Plans were prepared after discussion with Teacher Teaching three topics stretched over 12 classes. Each of the classes were held for 50 to 55 mins. The data collection and analysis include,

lesson plan, feedback strategy, students understanding before the feedback given by teacher, peer and self-feedback. students learning after the feedback is analysed over their improvement in learning in pre and post feedback. The theoretical framework developed by Dylan Wiliam in 2011 has been employed to interpret beliefs and strategies related to formative assessment and feedback.

By observing a classroom, one can gain a thorough understanding of multiple facets, including their understanding of the material, their active participation, their ability to think critically by posing counter questions, the presence of diverse viewpoints, their proficiency in effective communication, areas where they struggle, enhanced comprehension, the development of strategic plans, and the implementation of creative ideas. This achievement could only be achievable by using the qualitative research methodology.

Observation

Glasson (2009) argues that teachers traditionally saw their role in the assessment process as giving students grades based on whether they passed or failed, recording this in their teachers 'diary, and summarizing the information in students' school reports. There is a need to deepen the understanding and development of formative assessment. Approaches that gave me motivation for this study enabled me to see the continuing need for in-depth, lesson-based professional research to improve teachers' views and understanding of the development of a highly developmental pedagogy and to inform of formative assessment for advancement and Enhancing Student Learning To Bridge The Gap Between Theory and Practice in implementing effective assessment strategies, it is clear that the involvement of teacher educators, school teachers and researchers with an emphasis in this area.

In this study 15 students were randomly selected for the classroom observation, and they have been observed in classes on the ongoing course- 'Assessment for learning'. Three Lesson

plans were prepared for observing improvement in students learning through feedback. For detailed (Black and William 1999) holds that the active participation of student-teachers in a classroom can help to uplift the educational level and, in the process, formative assessment is a pedagogical tool for improving learning. Therefore, it should be brought into the practice in real classrooms also, and not just in the policies, for that mindset has to be changed, and one should think out of the box instead of just following the traditional methods.

Lesson plan one brings forth the impact of feedback on students' learning. The major question discussed was: How was the changing mindsets of teachers a challenge in the implementation of CCE?

In this discussion, a gradual improvement in the learning of the students was observed. 'A' here initially talked about the changes that were required on the level of teaching and learning process in CCE. Here she understood the changes that were required. But she needed more clarity on the barriers while implementing them and what were the limitations for these changes. The teacher took A's discussion further and explained it with the help of an example where she tried to assist the student's understanding of the prevailing barriers of mindset which couldn't be changed overnight.

The teacher here used the scaffolding technique of feedback. Here the teacher used simple illustrations to help students in improving their understanding. The discussion held between teacher and students improved learning through the process of developing ideas.

While the discussion was going on B was asked a question randomly by a teacher relevant to the ongoing topic. and he had a great point of view on it. He connected this discussion to the previous discussion, perhaps he learned from the previous discussion and made a convenient point in the discussion. The teacher added more points to make this discussion more meaningful. The topic had been discussed with both critical and analytical views which helped

students to relate it to their environment and to themselves. While the discussion was going on C gave his opinion on the ongoing discussion and said “... *I think it's not possible for a teacher to do remedial teaching being time bound.*” The teacher considered the point that student C made and further added to it. She gave a reference from NEP 2020 and talked about the strong recommendation of reducing the strength of students to 25-30 students so that it is easy for a teacher to pursue teaching by giving equal attention to every child. The teacher also elaborated on what remedial teaching is. The Teacher was very determined to make her students think more about the remedial ways of teaching during this discussion. D shared his own experience of CCE, he said while CCE is for the overall development of the student he experienced something different, he said “*CCE overburdened us, ...Instead of improving our learning and skills we were suffering and were not able to play cricket which used to be our favourite thing to do after school.*” So, here it has been observed that students were able to connect with topic and were able to associate the topic with their real-life situations, Teacher’s feedback helped students to understand the importance of communication in teaching be it within teachers or student-teacher.

Initially the students had the idea only of a pattern of changes through CCE. After the feedback they got clarity on the major obstacles in the implementation of CCE. The process of feedback also helped them to reorganize their scattered ideas to put them in a coherent manner seen as enhancement of learning through the process of feedback.

In lesson plan two the concept of assessment for learning was discussed. Students were given a class task to do a write-up on Assessment for learning. Here written feedback was given to each student. This feedback made at least one positive descriptive remark, and suggestions were made for further improvement. Revisions were made and resubmitted by the students showing feedback were incorporated. This helped students enhance their understanding of the content transacted in the classroom. In B’s write up the teacher figured out the answer was given

step by step which means that the student has an organized understanding and tries to keep the points in order. To D's write up teacher gave feedback, Teacher added a remark- *"you have grasped the concept of Formative Assessment in a way, you can further improve your writing more with persuasive arguments in your writing."* The teacher here talked about the strength of a student's write up along with improvements he needs to make with a positive remark which will motivate the student to improve his write up and his understanding. Teacher communicated all points she observed through suggestions- *"There is a need for coherence in writing. You can share your classroom experience where you could relate to formative assessment in practice, it will help you with better insight. Collecting all fragmented ideas, putting them in an order will help in progressive flow in writing."*

C and D also received written feedback from the teacher which helped them gaining understanding on how to build an argument while writing along with the clarity of the topic.

In lesson plan three the aim of teaching was to develop the students' understanding of the 'Constructivist approach of Learning'. Questioning was chosen as a method to engage students in the classroom process. For example: 'what motivates you to learn?' C responded, 'curiosity to know things around us motivates us to learn'. Such responses were taken to level up the questions deliberately by the teacher. She kept elaborating, adding perspectives, to the students' responses. This form of feedback helped to bridge the gap between what they know and what they didn't know. The topic had been discussed with both critical and analytical views which helped students to relate it to their environment and to themselves.

Analysis and Findings

Revisiting the feedback as a powerful tool in the classroom teaching- learning process. In this study improvement in learning of students was clearly seen among the students with the application of feedback mechanism. Hence a good understanding of feedback mechanisms is

desirable among teachers. The administrators and policy makers need to acknowledge the importance of feedback embedded in formative assessment.

The present study has come up with many interesting and meaningful findings. The root of the study is in assessment which is an integral part of the teaching-learning process as assessment helps to know where students are standing in their learning. This learning is enhanced by way of formative assessment. This form of assessment includes the tasks, activities and processes that accelerate students' learning through feedback. It is the key component of formative assessment. The current study highlights the importance of different feedback strategies and their implementation in a classroom setting. Feedback strategies include oral feedback, descriptive feedback, positive yet critical feedback and various other feedback strategies. While observing the classroom It has been observed that, Oral feedback is essentially reinforcement and helpful information that expands the horizon of thinking and thereby understanding, descriptive feedback that discerns the long practices of using ambiguous words like 'confusing', 'adequate', 'excellent', 'poor' etc. They aren't helpful to students. Instead, feedback that focuses on clear affirmative sentences that really provide helpful information to students about their learning and performance. Then there are non-verbal forms of the feedback given in the form of cues such as maintaining eye contact, tone of voice, gestures, and others.

When feedback does not present a chance for improvement, it becomes less meaningful. Therefore, the students' incorporation of the corrective measures is just as crucial as the feedback's quality. To ensure they receive comments, they must edit and polish their work. Additionally, it must be made sure that feedback is given while instruction is still in progress. The ultimate purpose of feedback, in all its forms and applications, is to help the student move closer to the learning objectives. It is critical that mentors understand exactly what learning objectives need to be met. Hence, several, ongoing assessments are carried out in formative assessment to get pupils closer to the learning objective. As a result, the concepts of instruction,

reteaching, revision, and feedback assimilation become essential. It should be mentioned that unlike summative exams, formative assessments are not evaluated. They are a part of the teaching-learning process in the classroom. Instead, formative evaluation should be viewed as an addition to summative evaluation. Summative assessments demonstrate the degree to which learning objectives have been achieved. Students who achieve a satisfactory level of performance on summative tests are deemed ready to progress to new content, tasks, and activities. Grading and Evaluation are justified at this juncture. Both teachers and students benefit from formative assessment. Teachers can determine pupils' areas of strength and weakness and promptly implement measures to improve their learning. Teachers play a crucial role in formative assessment. Formative assessment aids students in achieving their desired level of competency. Self-feedback enables them to enhance their proficiency in mentoring. The quality of their own work. Their level of self-control increases in direct proportion to the degree of critical evaluation they apply to their own work.

Additionally, this enhances their capacity for metacognitive thinking. Affective formative Assessment results in both self-regulations, which promote learning. After studying multiple facets of the feedback, it has been observed that it has the power to enhance classroom instruction and learning. It has been noted that the interactive learning environment motivated pupils to learn and gain knowledge.

The type and quality of feedback are key variables in shaping and distorting the student's learning. The research study included two types of feedback strategies: scaffolded feedback and descriptive feedback. The use of scaffolded feedback actively involved the students in critical thinking, while the provision of descriptive feedback offered them valuable insights to recognize their areas of proficiency and areas for improvement.

The teacher seemed to be recognizing the areas where students were having trouble and

helping them improve their learning by adjusting teaching to cater to their specific needs.

An assessment exercise is beneficial for both students and teachers as it offers valuable feedback that can be utilized to evaluate one's own progress or the progress of others. Feedback also helps in modifying teaching- learning activities. such activities are 'Formative Assessment' when the outcome is helpful in improving teaching to meet the learning goals. (Black, Harrison, Lee, Marshall, and Wiliam, 2004, p.10), (cited by William, D. 2011)

Conclusion

Formative assessment serves as a powerful pedagogical tool in higher education, fostering continuous learning by integrating timely and meaningful feedback into the instructional process. Formative Assessment is crucial for improving learning, but it should not be regarded as the final assessment. Instead, it is seen as a complement to summative assessment. Summative assessment indicates the extent of correction needed in students' learning, whereas formative Assessment helps discover learning gaps and improve them regularly. Formative assessment and summative assessment are closely interconnected. Feedback plays a central role in this approach, guiding students to reflect on their understanding, improve performance, and become active participants in their learning journey. When used effectively, formative feedback promotes deeper cognitive engagement, supports self-regulated learning, and enhances long-term academic achievement. In higher education classrooms, where diverse learners require personalised support, formative assessment empowers instructors to create responsive, student-centred environments that promote both equity and excellence in education.

According to the assessment and evaluation practice introduced by the CBSE, the nomenclature for formative assessment has been replaced by periodic test. The assumption underlying here is, the Continuous and comprehensive (CCE) Failed for many reasons some of which include teachers' mindset, lack of teachers training, and the idea of formative assessment

not being clearly communicated to the major population of teachers working in CBSE schools.

The NEP 2020 is emphasizing on competency-based assessment and for that there is a need of formative assessment practices along with the year-end examination. It claims, transforming assessment for optimizing learning and development of all students with a focus on the regular, formative and uses 'assessment for learning' in its document. Formative assessment is a valuable complement to summative assessment and can be implemented in our education system with the caveat that our teachers receive proper training on how to use formative assessment in the classroom. It is an immensely powerful tool that can elevate the standard of teaching and learning in the classroom. Overall, it has the capacity to enhance the quality of the education system. Hence, the implementation of formative assessment policy holds significant value for educators, administrators, and policymakers.

In higher education, teachers must dedicate significant time and effort in delivering feedback. Even with the evolving landscape of mass education, students still desire a feedback process that is transparent, clear, and equitable.

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