Formative Assessment In Academic Development: Reflection From A Bangladeshi Government College

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Abstract:

Formative assessment refers to a combination of various methods which are applied by the teachers while conducting an in-progress evaluation of students. This study was conducted to investigate by what means formative assessment contributes to academic development based on a Bangladeshi government college and how formative assessment could be implemented in the classroom. To inquire evidently, eight teachers were interviewed in this qualitative study. The finding of the investigation showed that if formative assessment was applied by the teachers in students' evaluation, the development in academia could have been accelerated.

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I. Introduction

Academic development is crucial for arousing and propagating quality education across the country. Summative assessment-based teaching is the prime obstacle to academic development that has kept teachers reluctant to look after the quality of students' learning. Such traditional assessment usually takes place at the conclusion of a specific instructional period, where there is hardly any opportunity for the teachers to identify where learners are struggling and facing difficulties and plan the next lessons by focusing specifically. Summative assessment refers to the assessment of learning. This is why formative assessment is the perfect strategy to improve students' progress, which is incomparable in terms of academic development since it is the assessment for learning. Gardner has given the definition of assessment for learning as "the process of seeking and interpreting evidence that learners and teachers use to find out where the students are in their learning, where to go, and how crucial to reach there" (Gardner, 2012,p.3).

To clarify, the terms used in this paper have been defined in the following: summative assessment, formative assessment, outcomes, and evaluation. Formative assessments are the activities that teachers conduct in the classroom to assess their students' learning which can be used as feedback in the following to improve teaching and learning (Black & Wiliam, 2010). According to Beverley, formative assessment involves the collaboration of teachers, interpretation, and information procedure about the learners' progress, in order to evaluate the learning, within the learning process (Beverley Bell, 2000). Formative assessment refers to a combination of various methods which are applied by the teachers while conducting an in-progress evaluation of student comprehension, learning needs, and academic progress during a lesson, unit, or course. Teachers can identify concepts that students are struggling to understand, the difficulty they are facing to acquire skills, how teachers need to adjust lessons about the learning standards which have not been achieved by them yet, instructional techniques, and academic support. Collecting detailed information about learners to improve instruction and their learning is the general goal of formative assessment.

Summative assessment refers to an assessment that is conducted at the conclusion of an instructional period in a course. These assessments are administered to evaluate students' progress by comparing the learners' performance to a standard or benchmark. These are traditional assessments that have been preached because of global trends. Summative assessment opposes formative assessment, which identifies the issues and difficulties students face and summarizes their development at a particular time. Keeping students' learning assessments apart, summative assessments can also be used to verify the eligibility of students to enroll in certain programs or qualifications (Harlen & Gardner, 2010). A widely expressed perception of researchers who have conducted studies into summative assessments is that the rise in the number of test scores is because the teachers and learners are greatly familiar with the tests rather than improving learning (Koretz, 1988, 1991; Linn, 2000; Kohn, 2000).

Outcomes are the results or consequences produced from an event, which can be set according to the aims or objectives of a particular project. Outcomes can be both positive and negative depending on whether they produce invaluable benefits to the stakeholders, or the stakeholders find them unsatisfactory. In a formative assessment, when unsatisfactory results are detected, the teachers prepare their lessons to evaluate such results of the students who are facing difficulties in their progress. Evaluation refers to the establishment of the value or worth of something. In this research project at Government Teachers' Training College in Sylhet, our evaluation aimed at identifying students' difficulties and improvement-required areas, and at better understanding how teachers can plan their lessons for the students.

To ensure effective teaching and learning, formative assessment should be preached as pertinent because such assessment helps students understand their learning goals, their standing in learning, and where to improve. Formative assessment can help learners to set up their learning goals, their standing to the learning goals, and the area where they can further improve their performance (Black & Wiliam, 2010; Sadler, 1989). However, the classroom assessment strategies applied by the teachers have remained exceedingly traditional and summative because of an influencing global trend in pedagogy. The extent to which formative assessment was being used in Government Teachers' Training College, Sylhet was investigated by this varied-phase methods study and explored how formative assessment may be more effective in academic development.

Assessing students' progress is a part of the educational process to figure out whether the learners have met the objectives and expectations of the teachers. To measure students' progress and find out how they are learning, the perfect and convenient strategy is formative assessment. Therefore, it can help us develop teaching approaches and meet learners' needs.

Out of varied strategies, formative assessment has some significant features that have made it exceptional within the teaching/learning process. By conducting a range of methods like analyzing students' work, strategic questioning strategies, in-progress evaluation, etc, teachers get to grasp the struggle and difficulties students face in their progress. Afterward, the teachers prepare their next lesson and commit to alleviating the difficulties and evaluating learners' progress. The formative assessment ensures academic development by specializing in students' evaluation over time. Firstly, formative assessment helps teachers identify the issues and difficulties of students by applying different effective methods within the process. Secondly, they plan their next lessons that specialize in evaluating learners' improvement-required areas. This can be why this assessment strategy is so effective and valuable since it focuses on students' difficulties specifically so teachers work to assist students to improve their weaknesses. In this way, by ensuring students' evaluation formative assessment plays a major role in academic development. This study is conducted for certain reasons. One reason is that this study will investigate thoroughly the significance of formative assessment and reveals to what extent it contributes to academic development. Another reason is that after the investigation we can come up with the procedure of how formative assessment techniques can be implemented in the classroom.

This case study for Formative Assessment in Academic Development contains two major objectives. The objectives are mentioned in the following- To describe whether or not and to what extent formative assessment is significant in the academic development of the students of the investigated college. To identify the formative assessment techniques that teachers can implement in the classroom of the investigated government college. The measurements of academic development have been conducted by summative assessments, which are traditionally applied by teachers because of global trends. This causes negative impacts on the evaluation of students since the issues and difficulties they are struggling with are not identified by the teachers and not taken further steps to prepare the next lesson plans to alleviate them. Therefore, rationally academic development is not ensured by such assessments.

This study aims to review how formative assessment plays a vital role in academic development by helping teachers identify the issues and difficulties students are facing or any skills they are struggling to acquire, and followed by planning the next lessons focusing on the evaluation of the students. As much research has already been conducted in formative assessment, there are some gaps yet to be covered. In any investigation so far, it is rare to find out exactly by what means formative assessment is significantly playing an essential role in the development of students' learning. This study investigates to what extent formative assessment is significant in academic development. It is also scarce to spot much research that has come up with the techniques of formative assessment that teachers can implement in the classroom. This study reveals those techniques through a very profound investigation for the betterment of students' learning.

II. Literature Review

Study on the Wider Issues about Assessment and the Evolution of Formative Assessment

Assessment has been studied by many educators to accomplish severe purposes and alleviate issues regarding assessment in order to improve learning for pupils. According to Zou (2008), Assessment provides various purposes such as encouraging students, guiding them towards the proper direction to enhance learning, identifying and helping students and teachers with feedback, and analyzing whether teachers are achieving the

expected results (Zou, 2008, pp.82-83). The influential MacFarlane Report (Committee of Scottish University Principals, 1992) found that assessment is the most important factor in students' learning (Falchikvov, 1995, p.160). George and Cowan stated a fact about assessment that what and how assessment is conducted profoundly influences learning, for better or worse, and is a prime factor that can foster base or deep learning (George and Cowan, 1999, pp.98-99). Likewise, Mortimer mentioned that it is evident from records that the development and evaluation of assessment criteria and the whole academic process are related directly (Mortimer, 1998, p.186).

Assessment is pretty radical in educational evaluation and development; therefore the importance of improving the quality of assessment is evident. Although the importance of assessment is proven, there is significant room for improvement in assessment according to substantial evidence (George and Cowan, 1999, p.99). It is stated by Zou (2008) how challenging it can be to conduct a proper assessment as he mentioned that it is complex and not simple to set up an appropriate assessment; teachers need to take several factors into consideration including students' number, time, resources, and course objectives (Zou, 2008, p.83). Quality Assurance Agency (QAA) reviews demonstrated that when assessment is compared to other aspects of the curriculum, it appears as weak in general; feedback is often given slowly and in a negative way, being unable to provide appropriate guidance for learners (York, 2005, p.127). It is also found that widespread and growing dissatisfaction with guidance and feedback has been highlighted by some student surveys, a concern reflected by evidence from several quality assessment visits (QAA, 2007, p.2). Another report mentioned by Nicol (2009) that the UK National Student Survey consistently depicts that assessment and feedback are rated with lower scores than other indicators according to student satisfaction (Nicol, 2009, p.9).

Research in Scottland demonstrates that the flow of changing assessment practices with the changing environment in higher education has not been balanced (Hornby, 2005, p.15). The unit of resource has been enhanced by the rise in student numbers, resulting in unintended consequences, the lack of proper application of formative assessment, feedback is not meaningful and pretty slow, learning outcomes often are not assessed rationally, and the procedures are not standard for coordination across the courses. Despite growing recognition of the value of having a variety of assessment methods, the emphasis placed on exams and standard tutor-marked essays and reports keeps continuing (Hornby, 2005, p.17). Learners have been more demanding, and professionals in the assessment mechanisms have rising concerns with metrics of retention and results. A study carried out by AlMofti in 2020 in Iraq showed that the time-consuming nature of the formative assessment strategies and limitation of time of the class sessions makes it impossible for the teachers to integrate these strategies into their teaching.

Keeping those challenges into account, the implementation of formative assessment in the academic process belongs to demanding significance. The major purpose of formative assessment is to ensure academic development and to help learners analyze their own understanding and progress. The nature of formative assessment is distinctive, where students get opportunities to spend time and put effort into the improvement of their identified weaknesses. (Petty, 2004, p.463). The formative assessment procedure is a major way that can be elaborated reflectively (Hadrill, 1995, p.169). Since continuous feedback is unabated to the learning experience, stimulating and challenging students, regular formative assessment can be motivational (Leach et.al, 1998). From the lecturer's perspective, there are opportunities for the lecturers to find out whether their planned learning is actually happening (George and Cowan, 199, p.9). On a running course, it can be applied to perform judgments on the success of learning to take action before being too late (Petty, 2004, p.499).

A comprehensive study conducted by Black and William in 1998 found conclusively that formative assessment contributes to learning gains, amongst the most accountable for educational interventions. Other research reveals that the assessments that provide constructional feedback within the time of students' learning produce more effective learning on students' achievement than any other factors (Petty, 2004, p.450). Formative assessment with informative feedback can emphatically influence the learning progress, motivation of pupils, growing interest, commitment, intellectual challenge, independence, and responsibility; it is inconceivable to overlook the role of effective feedback on a learner's learning (Ramsden, 1992, pp.184-185, 193).

Formative Assessment In Academic Development

Formative assessment methods have been important in raising overall levels of student achievement. Quantitative and qualitative research on formative assessment has demonstrated that it is perhaps one of the most important intercessions for raising high performance ever studied. In their influential 1998 review of the English-language literature on formative assessment, Black and Wiliam concluded and found that:

"Formative assessment does enhance learning. The achievements appear to be quite accountable, and within the largest ever reported for educational interventions. As a description of just how big these achievements are, if they could be gained on a national scale, would be equivalent to promoting the mathematics attainment score of an average country like England, New Zealand, or the United States into the five countries on top (Beaton et al., 1996, Black and Wiliam, 1998, p. 61). These results provide a solid foundation for further research on effective teaching, learning, and assessment strategies.

Formative assessment can simplify learning by letting students judge their work and learning progress utilizing feedback from different kinds of teacher-made tests and performance tasks such as student portfolios. The notion of learning how to learn and becoming a lifelong learner is to work on the development of students' ability to assess their own learning (Boud and Falchikov, 2006). Likewise, Shepard (2005) elaborated on the idea and commented that the process of self-assessment based on an outspoken set of criteria uplifts students' responsibility for their own learning and takes the relationship between teacher and student into more collaborative state (Shepard et al., 2005). The habit of self-assessment of learners results in monitoring their own performance (Sadler cited in Shepard et al., 2005, p.291) and self-evaluation of their own understanding based upon apparent criteria and distinct feedback (Klenowski cited in Shepard et al., 2005, p.291). This afterward improves students' self-regulation and self-direction of their own learning, which are significant skills for lifelong learning in the 21st-century knowledge-based economy. Since students are engaging in classroom activities by judging their learning based on constructive feedback from the instructor, formative assessment is exposing them to access to improve their learning over time which ensures an acceleration in academic development.

According to Boston (2002), there are bunches of benefits to applying formative assessment for teachers while taking classes, such as teachers are able to determine what standards students already know and to what degree, they can decide what minor modifications or major changes in instruction they need to make so that all students can succeed in upcoming instruction and on subsequent assessments, they can create appropriate lessons and activities for groups of learners or individual students, and they can inform students about their current progress in order to help them set goals for improvement. It is evident that teachers get a profounding concept about the standing of every individual learner in the classroom with respect to intelligence, personality, attitude, and achievements, which leads them to set a convenient lesson plan in the following to improve teaching and learning.

Formative assessment or appraisal motivates teacher-student relationships. The general public has taken formative assessment into consideration as a significant source of motivation for learning; (Yin, Shavelson, Ayala, Ruiz-Primo, Brandon & Furtak, 2008, Olagunju, 2015). They studied twelve (12) teachers and their students in middle-level schools over 65 to 249 days. They found that mixing levels of implementation may have been the factors behind the systematic review or evaluation of the evidence of research. Additionally, the researchers found out that a system of feedback that can create a connection between ongoing and future learning was essential to level up students' learning (Hattie & Timperley, 2007; Havnes, et al., 2012).

Researchers Kim Bailey and Chris Jakicic have stated that common formative assessments elevate efficiency for teachers, promote equity for students, come up with an effective strategy for determining whether the guaranteed curriculum is being implemented in classrooms, and, more importantly, learned, inform the practice of individual teachers, enhance a team's capacity to improve its program, facilitate a systematic, collective response to students who are facing difficulty, and provide the most powerful tool for changing adult behavior and practice (Bailey, K.; Jakicic, C., 2012).

Formative assessment, while not an eraser that can alleviate all educational challenges, provides a strong means to meet goals for high performance, high equity of student progress, and providing learners with knowledge and skills for lifelong learning. Systems that address tensions that confine the wider practice of formative assessment and that bring up cultures of evaluation are likely to make greater improvements toward these goals.

III. Methodology

For this research, we have integrated 6 teacher interviews, who are currently engaged in academic teaching at the investigated government college. To conduct the interview, a questionnaire of 16 questions was designed by analyzing them profoundly. Each question in the interview was open-ended and it required verbal responses from the participants. The questions were pretty clear to understand since the questionnaire was perused by a prominent pilot study.

Methods And Design

The methodology we applied in this research is qualitative research method. Qualitative research method refers to a variety of methodologies in focus, applying an interpretative, naturalistic approach to its subject matter. While applying qualitative method in research, the natural settings of the researchers, attempting to make sense of, or interpret, and phenomena in terms of the meanings people bring to them are studied by the researchers. A variety of empirical materials such as case study, personal experiences, introspective, life story, interviews, observational, historical, interactional, and visual texts are involved in qualitative research method, which describes routine and moments with problems and meanings in individuals' lives (Denzin and Lincoln 2005:2). Researchers who use qualitative method in their research use their own eyes, ears, and intelligence to collect indepth perceptions and descriptions of regarding participants, places, and occasions. The findings are collected through various methods, and often at least two or more methods are used while conducting a qualitative study

such as direct observation, open-ended surveys, in-depth interviews, oral history, participant observation, content analysis, etc.

Qualitative research method plays crucial role in conducting action research appropriately. According to Cleland (2017), Qualitative research is very crucial in research conducted on education as it addresses the "how" and "why" research questions and activates a deeper understanding of experiences, phenomena, and context. Qualitative research lets you ask questions that cannot be easily quantified to comprehend human experience. Bryman (2004) said that Qualitative research helps teachers understand their students through the students' eyes, take contexts students bounded with into account, emphasize more on process, and develop grounded theories. Qualitative research approaches are used to understand everyday human experience in all its complexity and in all its natural settings (Wu, H. L., & Volker, D. L., 2009). Therefore, this research method is significantly vital in action research, that helps conduct the research with the accomplishment of significant findings.

Qualitative research provides with valid results in action research. Since this method involves people and observers in the procedure of research, the result exported from the study is likely to be pretty identical. The first of these, reality is socially constructed, which means reality cannot be measured directly—it exists as perceived by people and by the observer. In other words, reality is relative and multiple, perceived through socially constructed and subjective interpretations (Carson, D., Gilmore, A., Perry, C., & Gronhaug, K., 2001). For instance, other people may see as a threat what I see as an exciting event. What we consider a cultural ritual here in my country can be thought of as quite bizarre elsewhere. Qualitative research provides concepts of how the social world is understood, experienced, interpreted, or constructed. In this way, the validity of the results produced from qualitative method is reserved.

The instrument used in this study is interview. We integrated interviews of some teachers in the investigated college with a set of questionnaire regarding the implementation and significance of formative assessment in academic development so that we can come up the valid and reliable results. While interviewing, we creates a friendly, non-threatening atmosphere for the interviewees. Interviews preserve the validity and reliability of the study since the subjects are open to giving their opinion and the questions are reliable.

Interview is the most effective qualitative research instrument. They help the researcher explain, better understand, and explore research subjects' opinions, behavior, experiences, phenomenon, etc. Interview questions are usually open-ended questions to make sure that in-depth information is collected. Interviews are widely used in terms of collecting data in qualitative research. They are typically used as a research strategy to gather information about participants' experiences, views, and beliefs concerning a specific question or phenomenon of interest (Lambert and Loiselle, 2007). Sandelow (2002) purports that one-to-one interviews are the most commonly used data collection tools in qualitative research. The interviewer can judge the non-verbal behavior of the respondent, decide the place for an interview, control the order of the question, and judge the spontaneity of the respondent as well.

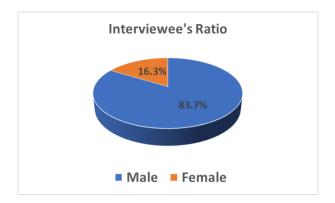
Research Context

The interviews were conducted in a government college in Sylhet. The college has a three-storied building with a square yard in the middle. On the ground floor, there are an office room, a principal's room, a mass-teachers room, teachers' personal rooms, and a canteen for teachers only. On the first floor, there are classrooms where the classes of B.Ed and M.Ed courses are taken. On the third floor, students of B.Ed (Hons) attend their classes and there is a library room on this floor. Every classroom has a multimedia projection and the teachers are sharply skilled to conduct classes using the projectors.

There are 25 teachers, 500 students, and 10 other employees in the college. There is a garden in the middle of the building in the square yard and there is a playground in front of the college. The classes are taken 5 days a week, from 9:15 to 13:15 o'clock every weekday. In the B.Ed (Hons), there are two semesters in a year, eight semesters in total in four years course. The semester final exam is taken worth 60 marks. In each semester, there are two incourse exams of 40 marks in total.

Respondents

To conduct this study, 6 teacher interviews have been integrated in the investigated college. Among them, there were 1 female teacher and 5 male teachers since the number of female teachers is lower than that of male teachers in the college. All the subjects are post-graduated, and some of them are Ph.D. holders from reputed international universities.



Reliability and Validity

Reliability and validity are concepts that are used to ensure the quality of research. They determine how appropriately a method, technique or test measures something. Reliability is basically about the consistency of a measure, while validity refers to the accuracy of a measure. It's crucial to consider reliability and validity when you are designing research, planning your methods, and noting down your results, especially in quantitative research.

Reliability is the term that determines how consistently a method measures something. If we achieve the same result by using the same methods under the same circumstances, we consider the measurement reliable. If we measure the temperature of a liquid sample several times under identical conditions and the thermometer shows an unchanged temperature each time, the results are reliable. Reliability refers to a concern that every time a certain observer is the source of data because we certainly have no protection against the impact of that subjectivity of the observer (Babbie, 2010, p.158). According to Wilson (2010), reliability issues are most of the time closely associated with subjectivity and once a researcher adopts a subjective approach to the study, then the level of the work's reliability is going to be taken into account.

Our questionnaire was verified by an expert for inter-rater reliability. We conducted a pilot study integrating two teachers in similar conditions and environments. They were interviewed with the same questionnaire under same circumstances that has been prepared for the research. The results extracted from this pilot study were quite similar. Thus, the questionnaire was reliable for a reliable study.

Validity is how appropriately a method conduct measurements of what it is supposed to measure. If research is highly valid, that means it outputs results that correspond to explicit properties, characteristics, and variations in the structural or social world. High reliability is one indicator that the measurement is valid. If a method is not reliable, the findings probably aren't valid. The validity of research can be explained as the extent to which requirements of the scientific research method have been followed during the process of generating research findings. Oliver (2010) takes validity into account as a compulsory requirement for all types of studies. There are different forms of research validity and the main ones are specified by Cohen et al (2007) as content validity, criterion-related validity, construct validity, internal validity, external validity, concurrent validity, and face validity.

In order to consider the validity of the instrument used in measurements, various sorts of validity have been suggested in the literature (Oluwatayo, 2012). They are listed in the following: Predictive Validity, Concurrent Validity, Content Validity, Criterion-Related Invalidity, Theoretical Validity, Jury Validity, Consequential Validity, Face Validity, Systemic Validity, Cultural Validity, Interpretive Validity, Descriptive Validity, Evaluative Validity, Statistical Conclusion Validity, Internal Validity, External Validity, Construct Validity, and Translation Validity.

We have gone through the following measures to ensure the validity of research include:

- a. Selecting the appropriate time scale for the study;
- b. Choosing the appropriate methodology, taking into consideration the characteristics of the study;
- c. Selecting the most suitable sample method for the study;
- d. Creating a completely free environment for the respondents to select specific choices among the answer sets.

It is important to understand that although threats to research reliability and validity can never be totally eliminated, however, we have strived to minimize this threat as much as possible. We have been able to come up with the findings that we intended to find. Therefore, the validity has been preserved in the study.

Data Collection And Analysis

The methodology applied to this study was qualitative in nature. Interviews were conducted as the instrument of data collection, where six teachers of the investigated college were interviewed. A semi-structured questionnaire of 12 questions, consisting of six questions for each theme of the study, was justified by an expert for inter-rater-reliability and sampling was of purposive. After data collection, it was analyzed thematically. Here is the research design of the study provided as follows:

Table: Research Design

Research Tool	Respondents	Sample Size	Sampling	Data Analysis
Semi-Structured	Teachers	6	Purposive	Thematic Analysis
Interview				

The table demonstrates tools details, and categories and number of samples, which were used altogether with the techniques of sampling and analysis.

IV. Findings And Discussions

General observation of the research is that all the teachers who were interviewed in the investigated college have been applying formative assessments in their classroom in many ways. The findings of the study have been descripted theme-wise as follows according to the research questions.

The Contribution of Formative Assessment in Enhancing Students' Learning

From the study, it is amazingly seen that all the respondents signifies the importance of formative assessment in academic development. According to all of them, formative assessment has a number of positive impacts in the development teaching-learning procedure. As one teacher said:

R6: "By applying formative assessment, a teacher can identify where students are struggling and facing problems and then can plan his next lesson plan considering learners' development." MRR

When the respondents were interrogated about the impact of formative assessment on students' engagement, it is revealed that students' engagement is increased by the application of formative assessment in the classroom by placing a positive impact on activating learners in the teaching-learning procedure. According to the teachers who were interviewed, formative assessment involves students in the classroom activities. For instance, one respondents stated:

R1: "When a teacher gives classwork, group work, peer work, oral, or writing task, students get engaged to the class activities." MDC

According to all the respondents, formative assessments such as asking learners questions in the classroom, asking them to write the answer of a question on whiteboard, or asking them to give an instant speech on the topic can help learners where their problems are. Some students might be overconfident about their learning. But, when they are assessed in an in-progress evaluation, they can point out their shortcomings. As an interviewee-teacher mentioned:

R3: "When students are asked open questions in the classroom, there are some students who can answer and some who might not. The students who cannot answer questions will be able to identify their problems." MSH

Each of the respondents agrees that by implementing such assessments, a teacher gets to know the level of the learners and get the opportunity to identify which students are struggling to understand the lesson or the topic. One of the respondents:

R5: "By conducting formative assessment, a teacher will find that there are some students who do not need help to understand as they can solve the given task by teacher whereas some students are struggling to understand. So, it becomes easy for the teacher how much efforts he has to put for which student." RM

One interviewee said that when a teacher does not apply formative assessment in the classroom, he/she might not be able to recognize the understanding level of students, or the issues and difficulties they are facing. As he stated:

R1: "If a teacher doesn't conduct formative assessment on a regular basis, he/she will not be able to understand students' level. He cannot recognize which student is bright or weak and what issues and difficulties they are facing." MDC

Learners' gradual development such as gaining problem solving skill, dealing with fear, or being confident can be ensured by the application of formative assessment, as all the interviewees insisted, by taking them into an ongoing process of assessment and feedback. Likewise, an interviewee stated:

R4: "When students are assessed in the process, they will be able to understand their own problems and then they will try to solve them. By doing this, they can learn skills like problem-solving, can gain confidence, and overcome fears. As a result, they get exposed to more opportunities to gradually develop himself/herself."

Every teacher who were interviewed agreed that formative assessment prepares learners for summative assessment. Formative assessment is an ongoing process that forms learners over time by assessing them and providing feedback gradually. From the feedback given by the teacher, they understand their improvement-required areas and overcome those problems. Eventually, students are prepared for summative assessment. As one of them stated:

R3: "Students' whole learning is formed gradually by formative assessments, and that helps them make a good result in summative assessment."

Summary

To summarize, all the respondents praised the role of formative assessment in the development of students' learning. Formative assessment provides learners with opportunities to assess their own learning, helps teachers understand their students' level and provide constructive feedback, creates opportunity for learners to gradually develop themselves by using feedback from the teacher, and prepares students for summative assessment.

How Formative Assessment Techniques Can Be Implemented In The Classroom

Since all the respondents of the study were teachers, they all claimed that they apply formative assessments such as asking questions, giving assignments, presentation, writing answer on whiteboard, etc. in their classrooms. One respondent explained how she applies formative assessment in the classroom:

R5: "I asked my students to prepare an MCQ questionnaire individually as an assignment and they would check each other's work and then give feedbacks, which will be supervised by me."

Almost all the respondents claimed that the application of formative assessment is easy, except one of them, who said that it depends on the ability of the teacher and the available resources. According to him:

R6: "It depends on the ability of the teacher and teaching resources. When there is enough time in the course and sufficient resources, it is easy to apply formative assessment in the classroom."

Although there are plenty of benefits of formative assessment in students' academic development, teachers face some issues in order to conduct such assessments in the classroom. According to the respondents, the challenges teachers face while applying formative assessment are as follows:

- a. Course load to complete.
- b. Time limit
- c. Absence of students.
- d. Inadvertent mindset of some teachers.
- e. Imbalance of student-teacher ratio.

As one of the respondents stated:

R6: "There are not so many obstacles. Some of them might be the absence of students, and course load to complete."

To apply formative assessment effectively, a teacher should set a proper plan according to the learning outcomes. Formative assessments might not be effective if the teacher does not include it in the lesson plan. According to all the respondents, formative assessment cannot be effective without a proper plan. As one of the respondents mentioned:

R4: "A teacher should have a lesson plan for every class. While making a lesson plan, he should include how and what kind of assessments he can apply in the classroom. Otherwise, a spontaneous assessment might not be effective." MSK

Rules set up by authorities can be a significant factor in the implementation of formative assessment in the classroom. Majority of the respondents agreed that teachers take responsibility to use formative assessment when they are supposed to do it and when applying formative assessment is no longer a choice but a must. As a respondent said:

R2: "There should be rules for teachers to include formative assessments in the lesson plan and for marking for annual exam. When there are rules to conduct such assessments, both teachers and students will be sincere about it."

However, one respondent stood against the rules placed over the teachers, as she believes that a teacher should be independent about his teaching strategies. She stated:

R5: "I think teachers should have independence here. There is no necessity to bind them by rules. Instead of this, college authorities can set up rules for students' presence."

We got some varied answers when the respondents were asked about the teaching environment of the investigated college to conduct formative assessment. One teacher replied in the positive about the environment while four of the teachers said that it depends on different perspective like teaching resources, teacher-student ratio, or students' attendance. As one of them stated:

R4: "It depends. I would say there is a partially favorable environment for formative assessment in the college. Apart from teaching resources, I think the environment is fine most of the time."

In contrast, one of the respondents argued and insisted on the unfavorable side of the teaching environment in the regarding college. He insisted:

R1: "There are lacks in the environment. The insufficient amount of time is one of the major factors. Since the teacher has to complete the syllabus, it's not always possible for him to conduct formative assessments all the time."

Summary

To summarize, there are some issues to implement formative assessment in the classroom. According to the respondents, it's easy to apply formative assessment in the classroom and many steps can be taken to apply formative assessment in the classroom such as teachers can make a proper plan to apply specific assessment strategy, some rules can be implemented to use formative assessment in the classroom, and the absence of students should be decreased.

V. Discussions

The findings of the study has many similarities with the persistent works on formative assessment, while some of them stood in contrast.

From the findings of the study, it can be seen from theme-1 (See 4.1) that both teachers and students get the opportunity to identify the problems students are facing, constructive feedback from the teacher motivates students to overcome their problems, and provide appropriate guidance. According to Zou (2008), we found the similar benefits of assessment as he said that assessment provides various purposes such as encouraging students, guiding them towards the proper direction to enhance learning, identifying and helping students and teachers with feedback, and analyzing whether teachers are achieving the expected results. By analyzing the finding of the study from theme one (see 4.1), we can see that all the respondents signified how formative assessment ensures gradual development of the learners for future. The studies conducted by Hattie in 2007 and Havnes in 2012 showed that a system of feedback that can create a connection between ongoing and future learning was essential to level up students' learning. According to Boston (2002), there are bunches of benefits to applying formative assessment for teachers while taking classes, such as teachers are able to determine what standards students already know and to what degree, they can decide what minor modifications or major changes in instruction they need to make so that all students can succeed in upcoming instruction and on subsequent assessments. From this study, we find similar features of formative assessment where (see 4.1) it was revealed that by implementing such assessments, a teacher gets to know the level of the learners and get the opportunity to identify which students are struggling to understand the lesson or the topic and afterward the teacher can prepare the lesson plan considering students' understanding level. A comprehensive study carried out by Petty in 2004 revealed that the nature of formative assessment is distinctive, where students get opportunities to spend time and put effort into the improvement of their identified weaknesses. Likewise, the analyzed data of the study shows an absolute similarity with Petty's study. As we found (see 4.1) that formative assessment is an ongoing process that forms learners over time by assessing them and providing feedback gradually. From the feedback given by the teacher, they understand their improvement-required areas and overcome those problems. We found from the findings of the study that formative assessment help teachers understand their students and the students get the opportunity to assess their own learning from the feedback given by the teacher, which plays a vital role in building a good relationship between the teacher and students (See 4.1). We can see an alike finding from a study conducted by Shephard in 2005, where he mentioned that the process of self-assessment based on an outspoken set of criteria uplifts students' responsibility for their own learning and takes the relationship between teacher and student into more collaborative state.

When the respondents were asked whether the application of formative assessment is easy or difficult, almost all the respondents claimed that the application of formative assessment is easy, except one of them, who said that it depends on the ability of the teacher and the available resources (See 4.2). However, a study carried out the Zou (2008) showed a scenario where he stated that it is complex and not simple to set up an appropriate assessment; teachers need to take several factors into consideration including students' number, time, resources, and course objectives. I think apart from resources, it's not complex to set up a formative assessment according to the lesson when a teacher has a proper lesson plan. Each of the respondents of the study signified the importance of formative assessment where the feedback is given in a positive way and they all agreed that formative assessment help teachers understand their students' level (See 4.2). We can see from the studies of Hattie in 2007

and Haynes in 2012 that a system of feedback that can create a connection between ongoing and future learning was essential to level up students' learning. So, I believe formative assessment is the system that can play this prominent role. According to the respondents (See 4.1), the challenges teachers face while applying formative assessment are such as course load to complete, time limit, absence of students, inadvertent mindset of some teachers, and imbalance of student-teacher ratio. A study carried out by AlMofti in 2020 in Iraq showed that the time-consuming nature of the formative assessment strategies and limitation of time of the class sessions makes it impossible for the teachers to integrate these strategies into their teaching. I would say, the time-consuming characteristic of formative assessment is one of the issues to work on.

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