DOI: 10.52131/pjhss.2023.1104.0664

Pakistan Journal of Humanities and Social Sciences

Volume 11, Number 04, 2023, Pages 3952–3960
Journal Homepage:
https://journals.internationalrasd.org/index.php/pjhss

An Investigation into Teachers' Perceptions of Formative Assessment Techniques and Students' Learning

Fahd Naveed Kausar [1], Noreen Ghazala[2], Shahida Jan[3]

[1] Assistant Professor, School of Education, Minhaj University Lahore, Punjab, Pakistan.
Email: fahdnaveed1@hotmail.com
[2] Ph.D. Scholar, School of Education, Minhaj University Lahore, Punjab, Pakistan. Email: noreentahir66@gmail.com
[3] Deputy Regional Director, Allama Iqbal Open University, Islamabad, Regional Campus, Multan, Pakistan.
Email: shahida.jan@aiou.edu.pk

ARTICLE INFO

Article History:
Received: October 12, 2023
Revised: November 25, 2023
Accepted: November 26, 2023
Available Online: November 27, 2023

Keywords:
Formative Assessment
Techniques
Students' Learning
Academic Achievement

Funding:
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The study's goals were to ascertain how instructors felt about formative assessment methods' impact on students' learning and how the public and private sectors differed in their views. The study also sought to determine how formative assessment methods affected university students' learning. All of the public and private universities in the Lahore district made up the population. In this investigation, the multistage sampling technique was applied. A questionnaire was used as the study's tool. Descriptive statistics was used to analyse the data. The study's conclusions showed that formative assessment methods and students' learning had a greater degree of agreement with the majority of respondents.

Corresponding Author's Email: fahdnaveed1@hotmail.com

1. Introduction

The practise of gathering data about a topic of interest using methods that are methodical and well established is known as assessment. The term "assessment practises" does not only apply to methods, steps, or tools. It is more comprehensive and incorporates occurrences in the evaluation of routine work. These standards may comprise planned, official processes that notify students that they are being assessed as well as unplanned, interactive processes that take place between teachers and students. Additionally, formative assessment is described as an evaluation that is conducted within the educational process with the aim of enhancing both teaching and learning. In order to increase student performance of intended learning outcomes and to give feedback for learning and instructional adjustments, formative assessment is carried out by both teachers and learners. In formative assessment, educators employ various methods and tools, including them into lessons and turning them into an integral part of the curriculum. This allows students to practise and gauges their progress towards the desired learning objectives (Hung, Ha and Thu, 2019). One effective method that teachers might assist in this endeavour is through formative assessment. It serves as a tool for comparing pupils' knowledge to their ignorance. Students get academic achievement awards based on their performance on these assessments, and both teachers and students advance to the next section of the curriculum (Huisman, 2018). Brief formative assessment tasks known as "formative assessment techniques" provide professors with feedback on the class while simultaneously providing students with a brief overview and comments on their own learning. Teachers use a range of tactics in the classroom to raise the learning and academic achievement of their pupils. Teachers employ formative assessment techniques, often known as classroom assessment techniques. Teachers will have information when they include more formative assessment strategies into their regular lessons. The use of formative assessment strategies can significantly influence students' academic progress and learning. Instructors can employ a variety of strategies to get crucial data regarding their students' comprehension, give them feedback, and help them create and meet worthwhile learning

objectives. Every strategy has the potential to improve both student accomplishment and learning.

Formative assessment is a cooperative procedure that should be advantageous to all participants, including students who wish to learn more and teachers who want to know how to adjust future lessons in order to pinpoint their areas of need for improvement. FA should make the educational process more flexible and dynamic. Changes and a diagnosis should be made while the learning sequence could still be modified. Furthermore, formative assessment is a technique for obtaining truthful evaluation proof of students' learning and adapting instruction based on the feedback. According to Popham, "assessment elicited confirmation of learners' position is employed by instructor to adapt their continuing teaching methods or by pupils," both students and teachers might drive instructional modifications. Majority of the researches and investigational studies also has familiar, enhanced achievement by learner to their coverage to a range of configuration of formative assessment. Formative study helps in development of students' progress from continues feedback from the teacher. On the other hand, the researcher was unable to locate a lot of information regarding the impact of formative assessment strategies on university students' learning and academic performance. With more relevant experiences, the researcher increased student learning and academic accomplishment through the use of formative assessment procedures. Researcher used eleven specific formative assessment techniques for this study so in this aspect this study is poles apart from other studies. The results of this study would reveal the importance of formative assessment techniques.

1.1. Objective

1- Identify the perceptions of teachers about the influence of formative assessment techniques on students' learning and academic achievements at university level.

2. Literature Review

Assessment is defined as a method to record the learner's ability, experience, beliefs and attitude in measurable terms (Capraro et al., 2011). In the process of teaching and learning, assessment is essential (Kondri, 2015). According to Huhta, as referenced in Spolsky (2008), assessment encompasses all methods of evaluating individuals, including tests, interviews, informal observations, quizzes, and self-assessments. Every session, teachers evaluate their pupils. Testing, on the other hand, is a method of assessment that is technically connected to set schedules and protocols (Weeden & Simmons, 2018). Formative assessment is a procedure that educators and learners use to identify and address pupils' education in order to increase it while the student is learning (Liu, 2013). Irving (2011) states that formative assessment is one of the most important components of the teaching and knowledge procedure. It gives teachers the ability to use information to enhance instruction and student development. Formative evaluation as a means of raising student performance. Formative assessment produces the enhanced accomplishments that are linked to students' timely feedback (Hameed & Akhter, 2020).

Learning is a process that is not entirely within the control of the learner, occurring in unpredictable environments with dynamic fundamental components. Learning is the process by which experience shapes behaviour (Houwer, et al., 2013). The phrase "learning approach" refers, according to Watkins (2017), quoted in Rodriguez and Cano (2007), to both the way students complete their tasks as determined by surveys and their objectives when faced with a learning environment (Hasnor, Ahmad, & Nordin, 2013). Cano, Martin, Ginns, and Berbén (2018) discuss three types of learning approaches: surface, strategic, and deep. Both rote learning and the content being memorised fall under surface learning. The best learning approach is deep learning, which is linked to substantive learning and appreciating the relevance and context of the subject matter. This is especially true for students who are pursuing higher education. Deep motivation and deep strategy are the two components of deep learning, according to (Biggs, 1987). A strong desire to study or advance one's learning potential is referred to as a deep motivation. Deep strategy refers to reading broadly in search of meaning and relating newly acquired information to previously acquired information or experiences. Strategic learning locating ideal study environments and resources time management (Chotitham, Wongwanich, & Wiratchai, 2014). Academic achievement, according to Kell, Lubinski, Benbow, and Steiger (2013), is a collection of learning objectives that a student meets and is closely associated with their mental capacity. While there is little

question about the critical role academic accomplishments play in students' lives now and in the future, academic performance was formerly considered to be the most significant result of formal educational experiences (Moore, 2019). Academic success among students has drawn the attention of researchers, parents, and policy makers. According to Adeyemo (2012), the main objective of education is to help students achieve academic success (Dev, 2016). Formative evaluation techniques are considered to be one of the most significant components in students' learning when analysing the practises used in Pakistan and other areas of the world. Formative evaluation aims to give students comments instead of assigning grades for the course. Formative assessment is an evaluation process that is now underway; it is not the entire process of educational activity. Instead, it is immediately related to the existing educational activity and focuses on improving it. In summary, formative assessment is analytical, focuses on teacher and student feedback, and involves intricately interfering with the teaching process. Formative assessment can assist in identifying the issues with instruction so that new or corrective actions can be implemented on time (Tsai & Liu, 2013).

3. Research Design and Methodology

The study's design is primarily descriptive. The research for this study was quantitative. Every public and private university in the Lahore district made up the population. Thirteen of Lahore's thirty-seven universities are private, and sixteen are public (Higher Education Commission, 2022). A sizable sample of educators and students should be included in the study. A multistage sampling procedure was used to collect the sample. Using a stratified sampling technique, the researcher first identified two strata (public and private). The researcher then used the cluster sampling technique to divide the entire population into three zones (clusters) based on where they were located. Using basic random sampling, two private and one public universities were chosen from each cluster. Using a basic random sampling technique, a sample of 60 professors was chosen, 10 from each public institution and 5 from each private university. A questionnaire was used as the study's tool. A five-point Likert scale was employed in the survey, ranging from strongly disagree to strongly agree. The current study used primary sources of data. Version 23 of the Statistical Package for Social Science (SPSS) was employed. The first objective's answers were found using descriptive statistics (mean, standard deviation, frequency), whereas the second objective's answers were found using inferential statistics (independent sample t-test).

4. Data Analysis at Items Level

Analyzing data of teachers' perceptions regarding the effect of formative assessment techniques on students' learning at factors level, data were further analyzed at items level for each of eleven factors separately.

4.1. Teacher asks Questions

The first factor of teachers' perceptions about formative assessment techniques was teacher asks questions. The following table shows the calculated data in detail.

Table 1: Teachers' Perceptions about teacher asks questions of formative assessment techniques at university level (600)

Items	SD(%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std.Deviation
When I asked questions students actively seek to understand the subject.	3 (5.0)	4 (6.7)	5 (8.3)	29 (48.3)	19 (31.7)	3.95	1.064
I always asked questions during the lesson to assess the progress of students.	2 (3.3)	4 (6.7)	5 (8.3)	32 (53.3)	17 (28.3)	3.97	.974
When I ask questions students can relate new knowledge with previous knowledge.	4 (6.7)	2 (3.3)	7 (11.7)	28 (46.7)	19 (31.7)	3.93	1.087
I usually ask questions during the lesson to assess the progress of students.	3 (5.0)	1 (1.7)	7 (11.7)	28 (46.7)	21 (35.0)	4.05	.999

This table demonstrates the formative assessment technique at university level fulfill teacher asks questions criteria/factor at high level (M=3.97; SD=0.87). According to responses,80% were agreed with When they asked questions students actively seek to understand the subject (M=3.95; SD=1.06), 81% were agreed with they always asked questions during the lesson to assess the progress of students (M=3.97; SD=0.97), 78% were agreed with when they ask questions students can relate new knowledge with previous knowledge (M=3.93; SD=1.08) and 81% were agreed with they usually ask questions during

the lesson to assess the progress of students (M=4.05; SD=0.99). Overall perception of teachers' was reflected higher level of agreement.

4.2. Multiple Choice Questions

The second factor of teachers' perceptions about formative assessment techniques was multiple choice questions. The following table shows the calculated data in detail.

Table 2: Teachers' Perceptions about multiple choice questions of formative assessment techniques at university level (600)

Items	SD(%)	(%)	U (%)	A (%)	SA (%)	Mean	Std.Deviation
When I gives multiple choice questions students always memorize information.	2(3.3)	4(6.7)	11(18.3)	31(51.7)	12(20.0)	3.78	.958
When I gives multiple choice questions students always have to study beyond the course requirements.	2(3.3)	6(10.0)	4(6.7)	29(48.3)	19(31.7)	3.95	1.048
When I give multiple choice questions students take a narrow view and concentrate on detail.	1(1.7)	3(5.0)	10(16.7)	31(51.7)	15(25.0)	3.93	.880
Students expect to obtain high scores When I give multiple choice questions.	2(3.3)	2(3.3)	13(21.7)	31(51.7)	12(20.0)	3.82	.911

This table demonstrates the formative assessment technique at university level fulfill multiple choice questions criteria/factor at high level (M=3.87; SD=0.71). According to responses, 71% were agreed with when they gives multiple choice questions students always memorize information (M=3.78; SD=0.95), 80% were agreed with when they gives multiple choice questions students always have to study beyond the course requirements choice questions students always have to study beyond the course requirements(M=3.95; SD=1.04), 76% were agreed with when they give multiple choice questions students take a narrow view and concentrate on detail (M=3.93; SD=).88) and 71% were agreed with students expect to obtain high scores When they give multiple choice questions(M=3.82: SD=0.91).Overall perception of teachers' was reflected higher level of agreement.

4.3. Think Pair Share

The third factor of teachers' perceptions about formative assessment techniques was think pair share. The following table shows the calculated data in detail.

Table 3: Teachers' Perceptions about think pair share of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
When I gives time to think students start to recite information.	2(3.3)	1(1.7)	8(13.3)	30(50.0)	19(31.7)	4.05	.910
When I asks to share questions students feel undue pressure and worry about work.	3(5.0)	3(5.0)	8(13.3)	25(41.7)	21(35.0)	3.97	1.073
Students can relate new knowledge to previous knowledge when I give time to think.	1(1.7)	4(6.7)	4(6.7)	30(50.0)	21(35.0)	4.10	.915
When I gives open ended questions students always keep in view time management.	2(3.3)	5(8.3)	10(16.7)	27(45.0)	16(26.7)	3.83	1.028

This table demonstrates the formative assessment technique at university level fulfill think pair share criteria/factor at high level (M=3.98; SD=0.73). According to responses,81% were agreed with When they gives time to think students start to recite information(M=4.05; SD=0.91), 76% were agreed with when they asks to share questions students feel undue pressure and worry about work(M=3.97; SD=1.07), 85% were agreed with students can relate new knowledge to previous knowledge when they give time to think(M=4.10; SD=0.91) and 71% were agreed with when they gives open ended questions students always keep in view time management(M=3.83; SD=1.02). Overall perception of teachers' was reflected higher level of agreement.

4.4. Asks Students for Discussion

The fourth factor of teachers' perceptions about formative assessment a technique was asks students for discussion. The table demonstrates the formative assessment technique at university level fulfill asks students for discussion criteria/factor at high level (M=3.95; SD=0.76). According to responses,80% were agreed with students always clear difficult points of content when they ask for discussion(M=3.97; SD=1.00), 73% were agreed with students always rely on rote learning when they ask for discussion(M=3.88; SD=0.95), 78% were agreed with they usually engage students in small groups' discussion regarding the lesson(M=3.98; SD=1.08) and 81% were agreed with when they ask for discussion students

always try to learn in order to repeat what they have already learnt(M=3.97;SD=0.80). Overall perception of teachers' was reflected higher level of agreement.

Table 4: Teachers' Perceptions about asks students for discussion of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
Students always clear difficult points of content when I ask for discussion.	3(5.0)	2(3.3)	7(11.7)	30(50.0)	18(30.0)	3.97	1.008
Students always rely on rote learning when I ask for discussion.	3(5.0)	0(0.0)	13(21.7)	29(48.3)	15(25.0)	3.88	.958
I usually engage students in small groups' discussion regarding the lesson.	4(6.7)	1(1.7)	8(13.3)	26(43.3)	21(35.0)	3.98	1.081
When I ask for discussion students always try to learn in order to repeat what they have already learnt.	1(1.7)	2(3.3)	8(13.3)	36(60.0)	13(21.7)	3.97	.802

4.5. Encourage Positive Behavior

The fifth factor of teachers' perceptions about formative assessment techniques was encouraging positive behavior. The following table shows the calculated data in detail.

Table 5:Teachers' Perceptions about encourage positive behavior of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
I always encourage students to reflect on how they can improve their learning.	1(1.7)	5(8.3)	5(8.3)	29(48.3)	20(33.3)	4.03	.956
I encourage students to review on their learning process and to think about ways to improve next time.	1(1.7)	5(8.3)	5(5.3)	28(46.7)	21(35.0)	4.05	.964
I always encourage students to work in groups to improve their learning.	2(3.3)	3(5.0)	7(11.7)	21(35.0)	27(45.0)	4.13	1.033
I always encouraged students to assess each other's work.	2(3.3)	2(3.3)	7(11.7)	30(50.0)	19(31.7)	4.03	.938

This table demonstrates the formative assessment technique at university level fulfill encourage positive behavior criteria/factor at high level (M=4.06; SD=0.69). According to responses, 81% were agreed with they always encourage students to reproduce on how they can get better their learning (M=4.03; SD=0.95), 81% were agreed with they encourage students to review on their learning procedure and to reflect about ways to get better after that time (M=4.05; SD=0.96), 80% were agreed with they always encourage students to work in groups to get better their learning(M=4.13; SD=1.03) and 81% were agreed with they always encouraged students to assess each other's work(M=4.03; SD=0.93). Overall perception of teachers' was reflected higher level of agreement.

4.6. Feedback

The sixth factor of teachers' perceptions about formative assessment techniques was feedback. The following table shows the calculated data in detail.

Table 6: Teachers' Perceptions about feedback of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
I always use quizzes in class to give general feedback on students learning.	1(1.7)	2(3.3)	5(8.3)	27(45.0)	25(41.7)	4.22	.865
I always give feedback on how well students understand course material.	2(3.3)	2(3.3)	4(6.7)	24(40.0)	28(46.7)	4.23	.963
I always give feedback to reflect on how students can improve their assignments.	1(1.7)	4(6.7)	5(8.3)	32(53.3)	18(30.0)	4.03	.901
I always discuss with students the progress they make.	1(1.7)	1(1.7)	9(15.0)	27(45.0)	22(36.7)	4.13	.853

This table demonstrates the formative assessment technique at university level fulfill feedback criteria/factor at high level (M=4.15; SD=0.68). According to responses, 81% were agreed with they always use quiz in classroom to provide general feedback on students learning (M=4.22; SD=0.86), 86% were agreed with they always give feedback on how well students understand course material (M=4.23; SD=0.96), 83% were agreed with they always give feedback to reflect on how students can get better their assignments(M=4.03; SD=0.90) and 81% were agreed with they always talk about with learners the improvement they make(M=4.13; SD=0.85). Overall perception of teachers' was reflected higher level of agreement.

4.7. Sharing of Personal Experiences

The seventh factor of teachers' perceptions about formative assessment techniques was sharing of personal experiences. The following table shows the calculated data in detail.

Table 7: Teachers' Perceptions about sharing of personal experiences of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
When I shares my personal experience students always become actively interested in the course content.	4(6.7)	0(0.0)	6(10.0)	37(61.7)	13(21.7)	3.92	.962
Students always put consistent effort into their studies when I share my personal experiences.	2(3.3)	2(3.3)	6(10.0)	28(46.7)	22(36.7)	4.10	.951
Students relate the conclusion of my personal experience with their learning.	2(3.3)	0(0.0)	7(11.7)	27(45.0)	24(40.0)	4.18	.892

This table demonstrates the formative assessment technique at university level fulfill sharing of personal experience criteria/factor at high level (M=4.06; SD=0.75). According to responses, 83% were agreed with when they share their personal experience students always become actively interested in the course content (M=3.92; SD=0.96), 83% were agreed with students always put consistent effort into their studies when they share their personal experiences (M=4.10; SD=0.95) and 85% were agreed with students relate the conclusion of teacher's personal experience with their learning (M=4.18; SD=0.89). Overall perception of teachers' was reflected higher level of agreement.

4.8. Use One -minute Paper

The eighth factor of teachers' perceptions about formative assessment techniques was use one-minute paper. The following table shows the calculated data in detail.

Table 8: Teachers' Perceptions about use one minute paper of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
Students learn better when I give one minute to ask about what I learned in class.	2(3.3)	1(1.7)	7(11.7)	26(43.3)	24(40.0)	4.15	.936
Students always learn better when I gives one minute to ask what the main question you learned in this class.	1(1.7)	2(3.3)	7(11.7)	25(41.7)	25(41.7)	4.18	.892
Students learn better when I asks what you found useful about today's class.	1(1.7)	2(3.3)	4(6.7)	36(60.0)	17(28.3)	4.10	.796

This table demonstrates the formative assessment technique at university level fulfill use of one-minute paper criteria/factor at high level (M=4.14; SD=0.68). According to responses, 83% were agreed with students learn better when teacher give one minute to ask about what students learned in class(M=4.15; SD=0.93), 83% were agreed with students always learn better when teacher gives one minute to ask what the main question you learned in this class(M=4.18; SD=0.89) and 88% were agreed with students learn better when teacher asks what you found useful about today's class(M=4.10; SD=0.79).Overall perception of teachers was reflected higher level of agreement.

4.9. Portfolio

The ninth factor of teachers' perceptions about formative assessment techniques was portfolio. The following table shows the calculated data in detail.

Table 9: Teachers' Perceptions about portfolio of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
Students learn better when I give opportunities to ask questions in class.	1(1.7)	2(3.3)	4(6.7)	32(53.3)	21(35.0)	4.17	.827
When I show examples in class students always try to examine the logic of the arguments.	1(1.7)	3(5.3)	5(8.3)	33(55.0)	18(30.0)	4.07	.861
Students learn better when I engaged students in the selection of some materials.	1(1.7)	6(10.0)	4(6.7)	32(53.3)	17(28.3)	3.97	.956
When I focuses on student's self-improvement rather than comparison with others students always self-motivated.	1(1.7)	1(1.7)	3(5.0)	29(48.3)	26(43.3)	4.30	.788

This table demonstrates the formative assessment technique at university level fulfill use of portfolio criteria/factor at high level (M=4.12; SD=0.60). According to responses, 86% were agreed with students learn better when teacher give opportunities to ask questions in

class (M=4.17; SD=0.82), 85% were agreed with when teacher show examples in class students always try to examine the logic of the arguments (M=4.07; SD=0.86), 81% were agreed with students learn better when teacher engaged students in the selection of some materials (M=3.97; SD=0.95) and 91% were agreed with when teacher focuses on student's self-improvement rather than comparison with others students always self-motivated (M=4.30; SD=0.78). Overall perception of teachers was reflected higher level of agreement.

4.10. Appraise Good Values

The tenth factor of teachers' perceptions about formative assessment techniques was appraising good values. The following table shows the calculated data in detail.

Table 10: Teachers' Perceptions about appraise good values of formative assessment techniques at university level (600)

Items	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std. Deviation
When I shows enthusiasm for the subject matter students always take an active interest in the subject.	1 (1.7)	2 (3.3)	5 (8.3)	32 (53.3)	20 (33.3)	4.13	.833
When I focus on quality conversations students always try to focus on problems relating concepts.	3 (5.0)	6 (10.0)	6 (10.0)	26 (43.3)	19 (31.7)	3.87	1.127
When I plan, teach, and assess to promote mastery for all students, students relate theoretical ideas to everyday experience.	2 (3.3)	3 (5.0)	4 (6.7)	25 (41.7)	26 (43.3)	4.17	.994

This table demonstrates the formative assessment technique at university level fulfill appraise good values criteria/factor at high level (M=4.05; SD=0.70). According to responses,86% were agreed with When teacher shows enthusiasm for the subject matter students always take an active interest in the subject (M=4.13; SD=0.83), 75% were agreed with when teacher focus on quality conversations students always try to focus on problems relating concepts (M=3.87; SD=1.12) and 85% were agreed with when teacher plan, teach, and assess to promote mastery for all students, students relate theoretical ideas to everyday experience (M=4.17; SD-0.99). Overall perception of teachers was reflected higher level of agreement.

4.11. Story Telling

The eleventh factor of teachers' perceptions about formative assessment techniques was story telling. The following table shows the calculated data in detail.

Table 11: Teachers' Perceptions about story telling of formative assessment techniques at university level (600)

Items	SD(%)	D(%)	U(%)	A(%)	SA(%)	Mean	Std.Deviation
When I pass on knowledge in a social context students always focus on unrelated parts of the task.	1(1.7)	5(8.3)	3(5.0)	35(58.3)	16(26.7)	4.00	.902
When I teach ethics, values and cultural norms in class students always reproduced what teacher desire.	1(1.7)	2(3.3)	9(15.0)	23(38.3)	25(41.7)	4.15	.917
When I tells story about a topic students always understand better that topic.	1(1.7)	2(3.3)	5(8.3)	32(53.3)	20(33.3)	4.13	.833

This table demonstrates the formative assessment technique at university level fulfill story telling criteria/factor at high level (M=4.09; SD=0.67). According to responses, 85% were agreed with when teacher pass on knowledge in a social context, students always focus on unrelated parts of the task (M=4.00; SD=0.90), 80% were agreed with when teacher teach ethics, values and cultural norms in class students always reproduced what teacher desire (M=4.15; SD=0.91) and 86% were agreed with when teacher tells story about a topic, students always understand better that topic (M=4.13; SD=0.83). Overall perception of teachers was reflected higher level of agreement.

5. Major Findings

1- Majority of teachers' perceptions about formative assessment technique (*M=4.01; SD=0.712*) were found at very high level of agreement.

2- Teachers' Perceptions about teacher asks questions of formative assessment techniques (*M=3.97; SD=0.87*) were reflected high level of agreement.

3- Teachers' Perceptions about multiple choice questions of formative assessment techniques (*M=3.87; SD=0.71*) were reflected high level of agreement.
4- Most of teachers' Perceptions about think pair share technique of formative assessment (*M=3.98; SD=0.73*) were reflected high level of agreement.
5- A large number of Teachers' Perceptions about asks students for discussion technique of formative assessment (*M=3.95; SD=0.76*) were reflected very high level of agreement.
6- A considerable number of Teachers' Perceptions about encourage positive behavior technique of formative assessment (*M=4.06; SD=0.69*) were reflected very high level of agreement.
7- A large number of teachers' Perceptions about feedback technique of formative assessment (*M=4.15; SD=0.68*) were reflected very high level of agreement.
8- Most of Teachers' Perceptions about sharing of personal experience technique of formative assessment (*M=4.06; SD=0.75*) were reflected high level of agreement.
9- Majority of teachers' Perceptions about use one minute paper technique of formative assessment (*M=4.14; SD=0.68*) were reflected high level of agreement.
10- Teachers' Perceptions about portfolio of formative assessment techniques (*M=4.12; SD=0.60*) were reflected high level of agreement.
11- A large number of Teachers' Perceptions about appraise good values technique of formative assessment (*M=4.05; SD=0.70*) were reflected high level of agreement.

6. Discussion and Conclusion

From the above findings it was noted that Formative assessment is a method of grading in which data about a student's performance is dynamically collected and then efficiently used to promote student involvement and dedication. The assessment methods listed below can be used to test the effectiveness of formative assessment approaches (i.e., to see how these techniques affect student learning and academic achievement). Formative evaluation is an assessment approach that updates the educator about the stage of students' learning and provides proof what time the instructor might need to make a delivery modification depending on the results. Students use formative assessment approaches to work jointly, clearly, efficiently, actively, successfully and with full strength and interest. Students are prepared for their impending experience and real-life difficulties via formative assessment methodologies. According to teachers' perceptions, Formative assessment techniques are a progress teaching method that can be applied at every level of learning, according to several studies. Different activities can be programmed by the teacher and students can participate in them in the classroom or outside of it. Students want to learn in an environment that is as healthy as possible. A teacher can set up such human activity in the classroom and have an impact on the kids. Overall, the literature on formative assessment suggests that colleges and universities are shifting their focus from teaching to learning. The goal of classroom assessment is to improve the learning quality of students.

It was concluded that most of the teachers' response level of agreement with respect to formative assessment technique was at high level of agreement. The respondent are at high level(agreed) about formative assessment techniques. There was greater unanimity among teachers when it came to how formative assessment techniques affected students' learning and academic accomplishment at the university level. There was no statistically significant difference in the formative assessment strategies used at the university level (public versus private), according to teachers' perceptions of the link and influence of these techniques on students' learning and academic progress. Differences between public and private sector educators about the relationship and effect of formative assessment methods on students' learning and academic performance in eleven key areas. There was no statistically significant difference between public and private university teachers' usage of formative assessment techniques.

References

Adeyemo, S. A. (2012). The relationship between effective classroom management and students' academic achievement. *European Journal of educational studies, 4*(3), 367-381.

Biggs, J. B. (1987). *Student Approaches to Learning and Studying. Research Monograph*: ERIC.

Cano, F., Martin, A. J., Ginns, P., & Berbén, A. (2018). Students' self-worth protection and approaches to learning in higher education: predictors and consequences. *Higher Education, 76*, 163-181. doi:https://doi.org/10.1007/s10734-017-0215-0
Capraro, R. M., Roe, M. F., Caskey, M. M., Strahan, D., Bishop, P. A., & Weiss, C. C. (2011). Research summary: Assessment. *Association for Middle Level Education*.
Chotitham, S., Wongwanich, S., & Wiratchai, N. (2014). Deep learning and its effects on achievement. *Procedia-Social and Behavioral Sciences, 116*, 3313-3316. doi:https://doi.org/10.1016/j.sbspro.2014.01.754
Dev, M. (2016). Factors affecting the academic achievement: A study of elementary school students of NCR Delhi, India. *Journal of Education and Practice, 7*(4), 70-74.
Hameed, S., & Akhter, M. (2020). Effect of Instructionally Embedded Formative Assessment on Students' Motivation to Learn at Higher Education Level. *Global Regional Review, 5*(1), 488-499. doi:https://doi.org/10.31703/grr.2020(V-I).52
Hasnor, H. N., Ahmad, Z., & Nordin, N. (2013). The relationship between learning approaches and academic achievement among Intec students, Uitm Shah Alam. *Procedia-Social and Behavioral Sciences, 90*, 178-186. doi:https://doi.org/10.1016/j.sbspro.2013.07.080
Higher Education Commission, h. (2022). HEC-recognized universities.
Huisman, M. (2018). Formative assessment and the impact on student learning.
Kell, H. J., Lubinski, D., Benbow, C. P., & Steiger, J. H. (2013). Creativity and technical innovation: Spatial ability's unique role. *Psychological science, 24*(9), 1831-1836. doi:https://doi.org/10.1177/0956797613478615
Kondri, B. Z. (2015). The effect of formative assessment on students' success. *European Journal of Social Sciences Education and Research, 2*(4), 245-253.
Moore, P. J. (2019). Academic achievement. In (Vol. 39, pp. 981-983): Taylor & Francis.
Rodriguez, L., & Cano, F. (2007). The learning approaches and epistemological beliefs of university students: a cross-sectional and longitudinal study. *Studies in Higher Education, 32*(5), 647-667. doi:https://doi.org/10.1080/03075070701573807
Spolsky, B., & Hult, F. M. . (2008). The handbook of educational linguistics 53-65.
Tsai, M.-H., & Liu, F.-Y. (2013). Multigroup structural equation approach: Examing the relationship among family socioeconomic status, parent-child interaction, and academic achievement using TASA samples. *International Journal of Intelligent Technologies and Applied Statistics, 6*(4), 353-373. doi:https://doi.org/10.6148/IJITAS.2013.0604.03
Watkins, C. (2017). Developing student-driven learning: the patterns, the context, and the process. In *Student-driven learning strategies for the 21st century classroom* (pp. 1-9): IGI Global.
Weeden, P., & Simmons, M. (2018). Formative assessment. *Debates in geography education*, 140-155.