

# An Investigation Of The Challenges Faced By Teachers In Applying Formative Assessment Practices At Public Secondary Schools

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## Abstract

*The current study intends to investigate the challenges faced by teachers in public secondary schools implementing formative assessment. This research study was also conducted in order to identify the gaps in formative assessment practices. Formative assessment plays a crucial role in enhancing the ongoing exchange of knowledge with the goal of promoting students' learning, an objective that has been well documented in the literature. However, it can be difficult to explain continuous assessment, especially in a classroom setting. The goal of this study is to help officials address the challenges experienced by teachers in secondary schools while implementing formative assessment techniques. This paper envisioned to explain how teachers in public secondary schools are implementing formative assessment procedures as well as the difficulties they encounter. The research plan has a quantitative focus. This study used descriptive research methodology. All secondary school teachers at Boys Public Secondary Schools in District Badin were the study's target population, according to the researcher. John Curry (2006) sampling formula was employed with simple random sampling method in addition to the Rule of Thumb (Carry, 2006). The Likert scale 5.0 was used to gather the data, and SPSS 26 was used for analysis. Future implications and suggestions for additional study are provided, accordingly.*

**Keywords:** *Formative Assessment, Challenges, Head Teachers, Teachers.*<sup>1</sup>

**Introduction:** As an integral part of classroom instruction, assessment serves as a vital tool for gauging students' comprehension, proficiency, and accomplishments. Formative assessment is the practice of evaluating students as they learn during the academic year. Over the past ten years, formative assessment procedures and their accountability in education have become more important, according to Cumming (2009). They clarified that

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the 21st century has a big initiative with high expectations for every student, in various fields of study, starting with educational opportunities.

Formative assessment proponents argue that it should only be used during instructional activities, not at the start or finish of a course, but rather only when teachers and students are actively engaged in teaching and learning. (Wiliam, 2014) According to a study based on formative assessment procedures, it is very important to monitor students' inspiration and accomplishments in the classroom. (Paul Black, 1998) claimed that the majority of tests used in classrooms are frequently shown to be insufficient indicators of student learning and that they promote rote and surface learning, which leads to surface learning in most cases. Earl, (2013).

It is explained that the assessment is a crucial component in determining the comprehension and skill level of the students, and it is a simple method of filling in the gaps that arise during the teaching and learning process. (Paul Black, 1998) defined evaluation as something that is only related to various things that concretize the intellectual content in a unique way that may be communicated to various learners in order to enhance their knowledge and abilities (Jones, 2005).

The description of formative assessment's function is also summarized, emphasizing that it creates goals and objectives, highlights learning, offers a precise set of assessment criteria, identifies learning gaps, and works well as a tool for making final decisions. According to Khattak (September 2012), formative assessment has been greatly impacted by Pakistan's year of British colonization. Its purpose is to determine students' comprehension, interests, and responsiveness, all of which help to improve learning outcomes (Greenstein, 2010). As per Muhammad (2017), formative assessment plays a crucial role in enhancing the teaching and learning process in Sindh, Pakistan's higher education system. The purpose of this study was to determine whether formative assessment and instruction are related.

Statement of the problem: One of the main procedures thought to support learning and eventual success is assessment. As information is used to adapt teaching and learning to fit the requirements of students, assessment becomes progressive. when teachers are aware of the gaps in their students' knowledge or how they are learning. In order to address each person's needs, several teaching tools are used, such as retraining utilizing alternative teaching strategies or encouraging more opportunity for exercise to close learning gaps.

The goal of the research task is to identify the challenges that public secondary school teachers have, when implementing formative assessment procedures. There are numerous gaps that have been explored by various other studies. One of these gaps is the difficulties teachers encounter while implementing formative assessment techniques, particularly in the district Badin (literacy rate of 30%) (Ailan, 2017), which is the subject of this research study. Even while estimating students' learning outcomes is theoretically predictable and essential for enhancing the teaching process

Objectives of the study: 1) To investigate the problems faced by teachers in applying formative assessment practices at Public Secondary Schools. 2) To analyze the impact of the challenges faced by teachers on formative assessment practices at Public Secondary Schools.

Hypothesis of the study: 1) There is no significant impact of the challenges faced by teachers on formative assessment practices at Public Secondary Schools.

Rationale of the study: The core contribution of this research study aims to investigate the problems faced by teachers in applying the formative assessment practices. In this regard the Ministry of Education in Sindh Education Sector Plan 2014-18 has also taken assessment on high priority (Prouty & Nabi, 2014). The head teachers' goals and activities for internal and external formative assessment methods were maintained as the main focus. Additionally, all teachers are instructed by the Ministry of Education to regularly use formative assessments, including diagnostic, formative, and summative assessments for better institutional outcomes. The ministry of education has also placed a strong focus on finding solutions to the issue's teachers have when implementing the curricula in their own classrooms.

The Ministry and the Directorate of School Education Hyderabad both recognise the substantial influence that formative assessment may have on learning. In this regard, teachers need to employ a range of strategies, including written tests, perception, correspondence, and student self-evaluation regarding midterm, weekly, monthly, surprise, and inspection. While it is widely acknowledged that students score poorly on final exams and often emulate copy culture because formative assessment techniques are not as successful as they should be. This is the justification for urging the researcher to pinpoint the problems that provide the greatest barriers to the application of formative assessment methods.

Tahir Mehmood (2012) states that his research used an explanatory viewpoint on the task of progressive evaluations in secondary level variables based on study hall English. The teacher's use of progressive assessment confirms the beliefs that both the students and the instructor had regarding assessment and the process of providing input regarding the learning of the students. The purpose of this study was to gain a better understanding of progressive evaluation and its many complexity in study hall use and implementation by utilising various sorts of information that were acquired through perceptions, overviews, and meetings. Three significant findings were approached by the analysis. First and foremost, the teacher demonstrated excellence in gathering developmental data. Secondly, there is a strong correlation between evaluation and personal significance. Furthermore, third, a notable obstacle to truly meaningful progressive assessment for every student was time constraints. These findings will be thoroughly examined, forming and connecting three distinct information sources: interviews, studies, and perceptions (Tahir Mehmood, 2012),

Rehmani (2012) Progressive assessment is defined as observing students' learning and providing ongoing feedback to help teachers improve their teaching techniques and students advance their knowledge. More specifically, the ongoing evaluation helps students identify their areas of weakness in both instruction and learning (Rehmani, 2012). According to Ahmed and Mussawy (2009), students' opinions and views regarding classroom assessment can be analysed using the content they have acquired so far in their studies to determine how much each individual student has learned about assessment in their classes (Ahmad & Mussawy, 2009). According to Allen and Lopez (2005), formative evaluation occurs throughout the ongoing teaching process rather than after the conclusion

of the study program. Finding the gaps in the fundamental teaching and learning process is a task that instructors frequently complete at any point during the instructional process. After then, it becomes simpler to get rid of the obstacles that teachers and students confront in the continuous learning process (Allal & Lopez, 2005).

According to Anderson and Palm (2017), teachers and students benefit from formative assessment during the instructional process because it makes their instructional practices operate more smoothly. The continual process of teaching and learning provides a means of handling problematic instructional situations as soon as they arise and can be readily resolved. It is investigated whether formative evaluation has a positive correlation with students' accomplishments, which serve as a proxy for teachers' expertise (Andersson & Palm, 2017). According to Ahmed and Mussawy (2009), learners' perspectives on formative assessment support their inclination towards their concept of perfection in the learning process. However, formative assessment is an authentic instrument/tool to measure learners' efficacy and also aids in filling in knowledge gaps that are created by the ongoing learning process (Ahmad & Mussawy, 2009)

According to Dumit N.Y (2012) Iabout The Assessment for Learning, assessment becomes formative when it is done within the teaching process as opposed to either before or after the interactive one. Formative assessment is a process that involves measuring students' learning progress on a regular basis and identifying their educational needs so that these can be met and instruction can be properly modified. (Dumit, 2012). According to Watson (2006), teachers are having difficulty effectively implementing formative assessment techniques to facilitate the next step of the teaching process. According to a different study, teachers who employ formative assessment techniques encounter a number of difficulties when putting these strategies into practice correctly. This barrier is mostly caused by teachers' lack of training on formative evaluation procedures and their repercussions. As per Jenny Nun, formative assessment plays a pivotal part in the educational process by facilitating the easy identification and prompt and effective resolution of learning obstacles. A correct path towards improving education is discovered through all of these methods, assisting teachers in self-evaluation, conceptual skill modification, and determining the next course of action for ongoing instructional process development (Watson, 2006),

According to Paulo et al, (2009), the only way to achieve greater success in the field of education is to employ appropriate formative assessment methods, which are seen as a crucial procedure and are employed as a strategy to help teachers close instructional gaps. It is absorbed with the ways, breaking down into several approaches, through which they communicate with students. It helps them understand how to schedule learning opportunities and steer them towards academic success. It also teaches them how to interpret the actions of the children. Progressive assessment canters the path towards instruction and learning, generating students' "shape out how to learn" capacities. Through procedure, pupils are included as partners in that entire process. It also strengthens students' abilities in both self- and peer-assessment and encourages them to develop a variety of outcome-centered learning strategies. People who are learning to make decisions about the nature of their own and their friends' counteracting well-characterized criteria and who are successfully broadening their perspective to see new ideas emphatically rather than just absorbing data are the ones who are designed for primary needs and abilities for long-lasting learning accomplishments (Paulo et al., 2009).

## Research Methodology

Survey method was carried out in this research study to examine the challenges faced by teachers in applying formative assessment practices.

Positivism Philosophical stance was undertaken by selecting the descriptive type of research and quantitative approach due to the nature of data to carry out this study. A descriptive research study is conducted with specific goals that lead to predetermined results. This study explains the distinctiveness of those who engage in reaction to a careful product or significant performance (Singh, 2006). The Population of the study was comprised of all the head teachers and teachers of Boys` Public Secondary Schools in District Badin.

TALUKA	No. of Schools/Head Teachers	No. of Teachers
<b>Badin</b>	<b>11</b>	135
<b>Tando Bago</b>	<b>08</b>	70
<b>Tallhar</b>	<b>09</b>	90
<b>Matli</b>	<b>18</b>	160
<b>S.F Raho</b>	<b>04</b>	44
<b>Total</b>	<b>50</b>	<b>498</b>

Rule of Thumb was used with random sampling as suggested by John Curry (1984)

Population	Sample (Rule of Thumb)
10--100	100%
101--1000	10%
1001--5000	5%
5001--10000	3%
10000+	1%

The "Rule of Thumb" states that 100% of the research population will be chosen as a sample if the population is between 10 and 100. Since there are 50 schools, all of the schools and head teachers were chosen as samples using the Rule of Thumb. Although there are 498 teachers, 50% of the teachers were chosen as a sample based on the Rule of Thumb, which states that if a population is between 101 and 1000, 10% of the population will be chosen as a sample.

Taluka	Head Teachers (n)	Teachers (n)
<b>Badin</b>	11	14
<b>Tando Bago</b>	08	07
<b>Tallhar</b>	09	09
<b>Matli</b>	18	16
<b>S.F Raho</b>	04	04
<b>Total</b>	<b>n= 50</b>	<b>n= 50</b>

Questionnaire Likert scale 4.0 was employed as a study instrument to gather data from population representatives regarding a certain product of significance. The purpose of this

research study is to determine the point of view of the respondents regarding formative assessment techniques through the use of a questionnaire.

Validity is the ability to measure what is supposed to be measured, which clarifies how well the data is gathered and how well it covers the real sample of the research. In order for a questionnaire to be considered valid, experts must review its items and concur that it is a reliable indicator of idea. The study's data collection instrument's face and content validity were verified by educational specialists.

An indicator for determining how consistently scores are assigned is reliability. Cronbach's Alpha calculates a test or scale's internal consistency. The value mentioned in the table for the questionnaires is adequate and acceptable.

Research instrument	Cronbach alpha	N of items
Questionnaire for Head teachers	.739	10
Research instrument	Cronbach alpha	N of items
Questionnaire for teachers	.833	05

Analysis: The collected data were first analyzed for basic descriptive analysis and then inferential statistics was used to test the hypothesis in SPSS software.

Statement	Response	f	%
Lack of interests of management at school level, is a factor which directly effects on applying Formative assessment practices.	Strongly Disagree	09	18.0
	Disagree	11	22.0
	Agree	13	26.0
	Strongly Agree	17	34.0
<b>Total</b>		<b>50</b>	<b>100.0</b>

Result: It is found by the description of the table that 26% respondents were agreed on the given statement whereas 34% respondents were strongly agreed on the given statement.

Statement	Response	f	%
Poor planning from administration for applying Formative assessment practices.	Strongly Disagree	10	20.0
	Disagree	09	18.0
	Agree	13	26.0
	Strongly Agree	18	36.0
<b>Total</b>		<b>50</b>	<b>100</b>

Result: It is found by the description of the table that 26% respondents were agreed, while 36% respondents were strongly agreed on the given statement.

Statement	Response	f	%
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Lack of teacher`s trainings for assessment is also a problem faced by teachers in applying Formative assessment practices properly	Strongly Disagree	09	18.0
	Disagree	12	24.0
	Agree	13	26.0
	Strongly Agree	16	32.0
<b>Total</b>		<b>50</b>	<b>100</b>

Result: It is found by the description of the table that 26% respondents were agreed, while 32% respondents were strongly agreed on the given statement.

Statement	Response	f	%
Student teacher ratio (STR) is a problem in applying Formative assessment practices	Strongly Disagree	11	22.0
	Disagree	11	22.0
	Agree	12	24.0
	Strongly Agree	16	32.0
<b>Total</b>		<b>50</b>	<b>100</b>

Result: It is found by the description of the table that 24% respondents were agreed, 32% respondents were strongly agreed on the given statement.

Statement	Response	f	%
Poor Accommodation is also a barrier which constantly effects in applying Formative assessment practices	Strongly Disagree	09	18.0
	Disagree	10	20.0
	Agree	14	28.0
	Strongly Agree	17	34.0
<b>Total</b>		<b>50</b>	<b>100</b>

Result: It is found by the description of the table that 28% respondents were agreed, 34% respondents were strongly agreed on the given statement.

Hypothesis of the study: 1) There is no significant impact of the challenges faced by teachers on formative assessment practices at Public Secondary Schools.

#### Regression Analysis Table

Hypothesis	Regression Weight	Beta Coefficient	R Square	F-value	P-value	Hypothesis Supported
Ho	CFT-FA	1.297	.132	85.332	.000	Not Supported

The table of the statistical analysis represents the p-value+.000, which reveals that there is a significant impact of the challenges faced by teachers on formative assessment practices at Public Secondary Schools hence, statistical evaluation advocates the alternative hypothesis is accepted whereas, the null hypothesis is rejected.

**Discussion:** At present the assessment has been greatly influenced especially formative assessment is widely used since it is found that it significantly improves students learning achievements. According to this research study, one factor that directly hinders teachers from using formative assessment practices appropriately is a lack of interest on the part of school administration. This makes it difficult for teachers to use formative assessment practices to improve student learning and teaching outcomes. When the interests of the management are lacking behind the spirit of the faculty members is expected to be spoiled up. However, the application of formative assessment techniques is severely impacted by the assessment-related training of teachers; these teachers were found to be unskilled and unable to manage the process efficiently. The primary cause of the absence of formative assessment methods is teachers' ignorance on how to apply formative assessment in compliance with curricular amendments made on time. The study indicates that teachers in Sindh, particularly in the Badin area, have numerous challenges. One of the most significant ones is the student-teacher ratio (STR), which presents a significant obstacle for teachers to manage in a 40-minute period when there are over 100 kids in a classroom.

It is impossible to communicate with hundred students within 40 minutes, then how the practices of formative assessment can be possible; this is an area which is neglected since long. It is a dire need of time to deal with matter on priority basis, so that the formative assessment practices could be made timely and effectively. Other than this the accommodation is also a problem for teachers to conduct formative assessment practices. The high enrollment with less classrooms and seating arrangements are barriers to conduct the formative assessment smoothly, this problem the most noticeable for provision of better teaching and learning environment.

Formative assessment is used to help teachers as well as learners to grasp over the gaps of learning needs teachers' emotional attachment with their practices, if found, the teachers can solve the almost problems themselves. It needs the expertise and interest in instructional process, this can be brought into the result-oriented product, while setting up rules for adequate implication of formative assessment practices. The fundamental apprehension in terms of results is that the instructor can develop the instructional process where students at present are, where they are going, and above all, how they will arrive.

**Conclusion:** It is concluded that the most of the school teachers were on the same point of view that the lack of the interest of the management at school level is a factor which directly effects on applying formative assessment practices. If the management is not interested and can't Facilitate the teaching faculty to practice the formative assessment than it can create many hurdles for a teacher to apply the formative assessment practices smoothly at school level. The student-teacher ratio (STR), which sees one instructor working with more than 100 children at once, is another point of contention. Less accommodation at the same time is another obstacle that continuously affects the use of formative assessment techniques in educational settings. This gap alone has a severe negative impact on formative assessment procedures in addition to delaying the entire teaching and learning process, which has a severe negative impact on the entire educational system. It's also revealed in this research study that the problem which mostly teachers face is, poor or null schedule from the management and administration for applying the formative assessment practices timely, which may result in better teaching and learning outcomes. On the other hand, for better assessment practices it is mandatory for a teacher to be trained well known about the assessment techniques. Teachers also encounter difficulties implementing formative



assessment procedures as needed due to a lack of assessment training, particularly when curriculum changes.

**Recommendations:** Following recommendations regarding formative assessment practices are accorded respectively.

The school education department should priorities organizing a quick hiring procedure for teachers in order to preserve the student-teacher ratio (STR), which is a major flaw in the teaching and learning process. The appropriate timetable for carrying out formative assessment procedures should be supplied by school administration. Teachers should be assisted by school officials in carrying out formative assessment procedures in a timely and efficient manner. To raise the standard of formative assessment in the classroom, school administrators should get in touch with the organizations that train teachers on a regular basis. In order to get better outcomes, policy makers should ensure that teachers receive assessment training addressing the implications of new technologies. Moreover, the policy makers ought to create an environment of implicating the policy of rewards and appreciation for teachers those, who demonstrate improved student outcomes during the teaching and learning process.

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