



RESEARCH PAPER

Enhancing Reading Comprehension through Formative Assessment Practices: Evidence from an Experimental Study at Elementary School Level

¹Dr. Mahwish Safder, ²Dr. Arooj Khan and ³ Dr. Sadia Jabeen

1. Assistant Professor, The University of Lahore, Lahore Punjab, Pakistan
2. PhD, I.E.R University of the Punjab, Lahore Punjab, Pakistan
3. Lecturer, Department of Education, University of Lahore, Lahore Punjab, Pakistan

Corresponding Author mahwish.safder@ed.uol.edu.pk

ABSTRACT

Present study aimed to enhance students' reading comprehension through formative assessment practices at elementary level. The study was experimental in nature. A Quasi experiment pretest-posttest non- equivalent control group research design was used to conduct the experiment. Participants of the study were the students of grade 6 from elementary school of Lahore. Two intact groups were formed as control and experimental group. Each group has 30 participants. A pretest and posttest was developed to measure students' reading comprehension through formative assessment technique. English Reading Comprehension Test was developed by the researcher which included MCQs, short questions and reading comprehension paragraphs. A table of specification was developed for items selection. An item analysis was conducted to check the item difficulty of the test items. Lesson plans were developed by the researcher to conduct the experiment. Formative assessment techniques including analyzing students' work, strategic questioning and think pair share were applied to develop reading comprehension skill among students of grade 6. Data were analysed using independent samples t-test and paired samples t-test to test the hypotheses of the study. Findings of present study concluded that formative assessment technique has significant effect in enhancing 6th grade students' English reading comprehension, whereas an insignificant difference was found between pretest scores of 6th grade control group students' English reading comprehension. Pretest-posttest scores found significantly different between control and experiment groups of 6th grade students' English reading comprehension before and after intervention. Study recommends to apply formative assessment techniques to enhance 6th grade students' reading comprehension at elementary level.

Keywords: Formative Assessment Practices, Jigsaw, Think Pair Share, Reading Comprehension, Elementary School Level

Introduction

The concept of assessment processes does not only refer to methodologies, procedures, or tools. It has broader implications that encompass occurrences that occur throughout the evaluation of everyday schoolwork. Formal procedures are planned and pupils know they were assessed, and informal procedures, which occur via interactions between instructors and students, can be included in these categories.

Formative assessment, as defined by the Chief Council of State School Offices (CCSS O), is a procedure used throughout learning process by teachers and students to provide feedback in to modify continuous teaching and learning in order to enhance students' success of includes the provision end results. While useful methods and techniques for eliciting student knowledge and comprehension are required, "formative assessment" doesn't really refer to an assessment of student knowledge and understanding. It does not

imply a particular type of evaluation tool, but rather to the use of assessment methods and approaches as part of a broader set of norms. (For example, by using measurement instruments). In any case, formative assessment necessitates a clear description of learning goals (Alonzo, 2018).

Interpretation it requires understanding something may lead a pupil to consider in a particular manner and making perceptions of students' ideologies. The way you adapt can be through pupil assessment or educational modifications made by the instructor (Andersson & Palm, 2017). Formative assessment appears to be an umbrella term for various teaching and learning techniques. Because summarising what formative assessment entails is difficult, the definition we are using today is not the final one. Although the phrase "formative assessment" has been used for almost fifty years, there is currently little consensus regarding what it actually entails (William & Leahy, 2015). Teachers can use formative assessment to monitor students' progress while also encouraging students to self-regulate their learning.

Literature Review

Formative assessment, according to Formplus Blog (2021), this makes it possible to enhance both the course's content and presentation while simultaneously evaluating students' achievement over time. It allows teachers to more easily track students' progress throughout a course or training programme. Because it occurs on the fly, the most accurate description of formative assessment is as a quick way to track a student's progress. In order to accomplish this, the research study must conduct a number of class exercises in order to obtain valuable feedback from the students. Formative evaluation is a technique for gauging students' understanding as they gain knowledge. In order to track the learner's progress all across the course, you can use this technique of ongoing assessment, which relies on research for the development of a collection of short-term queries and activities. As opposed to summative assessment, which takes place at the end of a lesson, formative assessment keeps track of the pupil's level of comprehension throughout the curriculum. It typically receives a low or no point value because it does not evaluate the pupil's understanding in relation to a requirement. As they learn, learners will face challenges such as having difficulty comprehending a concept or just a few pieces of evidence. Without formative assessment, it is nearly impossible for teachers to recognize when a student is having difficulties and offer the right assistance assessments. You can effectively plan and carry out formative assessment as an educator if you are aware of its qualities. Recognizing that formative assessment but instead learning take place simultaneously, for instance, will assist you prevent evaluating your students at the end of a course. You should also be aware of the following formative assessment aspects:

- It assesses both the learner's progress and the learning process. In-progress learning and instruction are incorporated with formative assessments.
- The assessment process is innovative.
- Unlike summative methodological approaches, where the pupil's progress is evaluated against a level of quality or key performance indicator.
- Formative assessment requires instructors and students to become intentional learners.
- The purpose of formative assessment is to gather actionable feedback that will aid in the overall teaching and learning process.
- It is a technique for diagnosing and evaluating.
- The outcomes of formative assessments are available immediately.
- Formative assessments don't receive grades.

When educators, pupils, or their circle of friends use academic achievement as proof to make decisions which are more likely to be more efficient or more well instead of those they'd had already made in the apparent lack of the provokes facts, this is known as formative practice (Black & William, 2009). Formative assessment, according to Formplus Blog (2021), this makes it possible to enhance both the course's content and presentation while simultaneously evaluating students' achievement over time. It allows teachers to more easily track students' progress throughout a course or training programme. Because it occurs on the fly, the most accurate description of formative assessment is as a quick way to track a student's progress. In order to accomplish this, the research study must conduct a number of class exercises in order to obtain valuable feedback from the students. Formative evaluation is a technique for gauging students' understanding as they gain knowledge. In order to track the learner's progress all across the course, you can use this technique of ongoing assessment, which relies on research for the development of a collection of short-term queries and activities. As opposed to summative assessment, which takes place at the end of a lesson, formative assessment keeps track of the pupil's level of comprehension throughout the curriculum. It typically receives a low or no point value because it does not evaluate the pupil's understanding in relation to a requirement. As they learn, learners will face challenges such as having difficulty comprehending a concept or just a few pieces of evidence. Without formative assessment, it is nearly impossible for teachers to recognize when a student is having difficulties and offer the right assistance assessments. You can effectively plan and carry out formative assessment as an educator if you are aware of its qualities. Recognizing that formative assessment but instead learning take place simultaneously, for instance, will assist you prevent evaluating your students at the end of a course. You should also be aware of the following formative assessment aspects:

- It assesses both the learner's progress and the learning process. In-progress learning and instruction are incorporated with formative assessments.
- The assessment process is innovative.
- Unlike summative methodological approaches, where the pupil's progress is evaluated against a level of quality or key performance indicator.
- Formativeassessment requires instructors and students to become intentional learners.
- Thepurpose of formative assessment is to gather actionable feedback that will aid in the overall teaching and learning process.
- It is a technique for diagnosing and evaluating.
- The outcomes of formative assessments are available immediately.
- Formative assessments don't receive grades.

When educators, pupils, or their circle of friends use academic achievement as proof to make decisions which are more likely to be more efficient or more well instead of those they'd had already made in the apparent lack of the provokes facts, this is known as formative practice (Black & William, 2009).

The skill of reading comprehension is very important in the learning success of each student and without satisfactory skills of reading comprehension, students cannot try in different field of education. Reading comprehension skills are very important which needed for all subjects area, not only in literature where comprehension skills are very important but also in social studies, mathematics and science (Verboeven & Leeuwe, 2008).

In the field of science, different studies indicate that some students have deficiency of prior knowledge and reading strategies to make references; thus, the student's comprehension of text is poor. It is observed also that some students need to special reading scheme to produce inference in order to understand school text book of science. Reading comprehension is fundamentally important for success as it provide a chance, learning to

read is a mean to an end. If students are unable to read and they do not possess reading skills they cannot improve their learning (Verboeven & Leeuwe, 2008).

The region of both a pupil's prospective and actual development growth is where the assistance is provided through social interaction. The instructor uses formative assessment in order to pinpoint learning gaps and implement various scaffolding strategies. After observing the student's development and participation, the teacher gives feedback. Formative assessment, in accordance with Shana and Abd Al Baki (2020), enables students and teachers to comprehend the degree to which students have learned over time

The idea of formative assessment has remained a mystery in the profession despite the fact that there have been many published studies on the topic. In order to investigate how different types of feedback affect students' levels of writing motivation in the Chinese EFL context, Detailed L2 feedback measures were created by Yu et al. (2020). Peer feedback was all evaluated using the Likert scale in this questionnaire. The study found that expressive feedback was the most frequent type of L2 writing feedback and that written corrective feedback was the least frequent. Additionally, it was found that students' performance to write was decreased by process-focused and written remedial feedback. However, learners' motivation was raised by expressive, self-, peer, and score feedback.

The Importance of Reading

Grabe (2008) states that precise reading is a process in which readers learn something from what they read and affects it in academic environment as a part of their learning. It is considered as an essential skill which help the learners in coding and understanding the educational material. It is the most important and basic skill that helps students in improving learning. Reading also helps people to interact and communicate with each other. Moreover, social environment is also very crucial where the reading activity is takes place.

Harmer (2007) states that reading is essential for acquiring basic information. The skill of reading can be split into two classes, instrumental and enjoyable prospect. The instrumental aspects deal acquiring knowledge and accomplishing goals in order to achieve scores, getting information from the text and find out the direction what the student want to do. The enjoyable prospect lets the reader to read for fun and joy. It could be reading from magazine, comics etc. The important factor is that readers will get knowledge and skill of reading and step by step they should be capable of communication with each other.

Explanation: Why All Children Should Build up Reading Skills?

- **Reading is Very Important.** It helps as essential skill for learning. It is not bound only to curriculum learning but also to another kind of learning in day to day life. It becomes very important to learn pamphlets, street signs and reading prescriptions.
- **Reading Improves Brain Activity and Also Improves Memory.** It makes brain development better.
- **Reading Improve Concentration Level.** This activity of reading helps children concentrate for long period of time. Focus on the idea delivered through reading.
- **It Improves Vocabulary and Communication Skills.** The extensive reading skill is practiced and more childcare vocabulary is enhanced. The more they read the more vocabulary they acquire. Reading also improves their writing skills because they get understanding about sentence structure.
- **Reading Makes the Analytical Skills Strong.** The story of a drama or any piece of writing creates a problem and then leads to its solution and hence the child understands the story line. Reading such stories provide students opportunity to determine through

the exclusive information presented in order to understand the issue and find out the outcome on their own by developing their analytical skills.

- **Reading Help Students to Know About the World Beyond.** Students have chance to develop memory of background knowledge when are open to content which may help them to learn about various cultures and societies as well as peoples, places and events outside their own experiences.
- **Reading Decrease Stress Level and Give Relaxation.** One can relax by reading the different type of literature. A good book conveys not only knowledge but also makes them capable of developing imagination of their own, which cannot be perceived through picture screen. Many kinds of writing are available for the readers.
- **Reading Help to Makes the Reader a Better Person.** Reading improve their knowledge improves their vocabulary, communication skills. Reading on regular basis helps the child to improve learning skills and hence perform better.
- **Reading is Fun.** According to the taste of people different style of writings are available. Most of people enjoy good book as compare to beautiful picture
- **Reading Foster Self-Confidence.** Students who read on regular basis develop powerful reading skills and become efficient reader. Powerful literacy skills can advantage to great self-satisfaction and as a result a more self-confident student (Schlauch, 2014).

Objective of the Study

Present study aimed to enhance students' reading comprehension through formative assessment practices at elementary level.

Material and Methods

Present study was experimental in nature. A Quasi experiment pretest-posttest non-equivalent control group research design was used to conduct the experiment. Participants of the study were the students of grade 6 from elementary school of Lahore. Two intact groups were formed as control and experimental group. Each group has 30 participants. A pretest and posttest was developed to measure students' reading comprehension through formative assessment technique. English Reading Comprehension Test was developed by the researcher which included MCQs, short questions and reading comprehension paragraphs. A table of specification was developed for items selection. An item analysis was conducted to check the item difficulty of the test items. Lesson plans were developed by the researcher to conduct the experiment. Formative assessment techniques including analyzing students' work, strategic questioning and think pair share were applied to develop reading comprehension skill among students of grade 6. Data were analysed using independent samples t-test and paired samples t-test to test the hypotheses of the study.

Results and Discussion

Table 1
Comparison of Pretest-Posttest Scores of 6th Grade Students' English Reading Comprehension (Control Group)

| Measures | <i>N</i> | <i>M</i> | <i>SD</i> | <i>t-value</i> | <i>df</i> | <i>Sig.</i> |
|-----------|----------|----------|-----------|----------------|-----------|-------------|
| Pre-Test | 30 | 15.40 | 3.57 | -8.254 | 29 | .000 |
| Post Test | 30 | 19.80 | 3.05 | | | |

Findings of the study revealed "a significant difference between pretest-posttest scores of 6th grade students' reading comprehension in the subject of English" at $p < .05$ level of significance.

Table 2
Comparison of Pretest-Posttest Scores of 6th Grade Students' English Reading Comprehension (Experimental Group)

| Measures | N | M | SD | t-value | df | Sig. |
|-----------|----|-------|------|---------|----|------|
| Pre-Test | 60 | 14.60 | 3.47 | -12.292 | 29 | .000 |
| Post Test | 60 | 23.56 | 2.58 | | | |

Findings of the study showed “a significant difference between pretest-posttest scores of 6th grade students' reading comprehension in the subject of English” at $p < .05$ level of significance.

Table 3
Comparison of Control and Experimental Group Pretest Scores in English Reading Comprehension

| Measures | Groups | N | M | SD | t-value | df | Sig. |
|----------|--------------------|----|-------|------|---------|----|------|
| Pre-Test | Control Group | 30 | 14.70 | 2.13 | 1.147 | 58 | .256 |
| | Experimental Group | 30 | 14.00 | 2.57 | | | |

Findings of the study indicated “an insignificant difference between control and experiment group pretest scores of 6th grade students' reading comprehension in the subject of English” at $p < .05$ level of significance.

Table 4
Comparison of Control and Experimental Group Posttest Scores in English Reading Comprehension

| Measures | Groups | N | M | SD | t-value | df | Sig. |
|-----------|--------------------|----|-------|------|---------|-------|------|
| Post-Test | Control Group | 30 | 21.60 | 2.25 | -2.868 | 57.68 | .001 |
| | Experimental Group | 30 | 23.33 | 2.42 | | | |

Findings of the study revealed “a significant difference between control and experiment group posttest scores of 6th grade students' reading comprehension in the subject of English” at $p < .05$ level of significance.

Discussion

Findings of present study concluded that formative assessment technique has significant effect in enhancing 6th grade students' English reading comprehension, whereas an insignificant difference was found between pretest scores of 6th grade control group students' English reading comprehension. Pretest-posttest scores found significantly different between control and experiment groups of 6th grade students' English reading comprehension before and after intervention. According to Shannon Davis, an English teacher at a high school, "Students crave feedback." Giving students feedback throughout the lesson is essential to effective teaching. They are occasionally unable to assess themselves. Before the next quiz, test, or other assignment, teachers can use formative assessments to show students what they already know and have mastered as well as what they still need to work on. I find it impossible to imagine continuing to teach for more than a single day without getting feedback from the students (Intizor, 2022). Formative assessment elements used in learning, cadets are able to activate their current knowledge and skills while also improving their learning abilities. It boosts self-efficacy and increases metacognitive awareness of how they learn. The interaction between teachers and cadets is altered by formative assessment. Frequent, positive assessment encourages students to focus on progress rather than grades (Zelenska & Kondra, 2022).

According to a study by Siddiqua and Ansari (2022), AFL in the classroom promotes students' constructive and lifelong learning while also fostering an effective relationship between the teacher and student. The current study sought to investigate how teachers viewed strategies and how they were used in the classroom. The quantitative paradigm as well as a survey design were used to conduct the current descriptive study. Teachers of

education were selected from government colleges in Karachi utilizing the random sample technique. Data were gathered using a closed-ended questionnaire that was broken down into three sections: knowledge of assessment and strategies; practices; and strategies used in the classroom. The research found that the majority of government college teachers were unfamiliar with the idea and its tactics. The ratio of the classroom implementation is limited due to a shortage of time and resources, irregular behavior management, and the dimensions of the classrooms. Putting together workshops and short courses can assist teachers in honing their pedagogical techniques and successfully implementing methods in the classroom.

Conclusion

Findings of present study concluded that formative assessment technique has significant effect in enhancing 6th grade students' English reading comprehension, whereas an insignificant difference was found between pretest scores of 6th grade control group students' English reading comprehension. Pretest-posttest scores found significantly different between control and experiment groups of 6th grade students' English reading comprehension before and after intervention.

Recommendations

Following recommendations were formed from present study.

1. It is recommended to plan and execute lessons in the classroom which requires careful consideration of the formative assessment of student understanding. A teacher can use technology to help them formatively evaluate their students and give them constructive criticism to enhance their reading comprehension at elementary school level.
2. It is recommended to conduct workshops and short courses that can assist teachers in honing their pedagogical techniques and successfully implementing formative assessment techniques in the classroom.
3. It is recommended to create engaging discussions, exercises, and learning tasks for the classroom that produce learning evidence.
4. It has been demonstrated that feedback is very helpful for both teachers and students by offering step-by-step direction, systematically and continuously in the learning process. For teachers, formative assessment may be a useful tool for professional growth and their own improvement.

References

- Alonzo, D. (2018). *Formative assessment and learning: What do teachers know and do?* Springer.
- Andersson, C., & Palm, T. (2017). The impact of formative assessment on student achievement: A study of the effects of changes to classroom practice. *Scandinavian Journal of Educational Research*, 61(6), 681–699. <https://doi.org/10.1080/00313831.2016.1172509>
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31. <https://doi.org/10.1007/s11092-008-9068-5>
- Council of Chief State School Officers (CCSSO). (2008). *Attributes of effective formative assessment*. CCSSO.
- Formplus Blog. (2021). *Formative assessment: Definition, examples & types*. <https://www.formpl.us/blog/formative-assessment>
- Grabe, W. (2008). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.
- Harmer, J. (2007). *How to teach English* (2nd ed.). Pearson Longman.
- Intizor, A. (2022). The importance of formative assessment in the classroom. *Edutopia*. <https://www.edutopia.org>
- Schlauch, C. (2014). *The importance of reading skills for students*. Education Publishing.
- Shana, Z., & Abd Al Baki, Y. (2020). The impact of formative assessment on students' learning. *International Journal of Emerging Technologies in Learning*, 15(11), 4–18. <https://doi.org/10.3991/ijet.v15i11.13903>
- Siddiqua, A., & Ansari, S. (2022). Assessment for learning (AFL): Teachers' perceptions and classroom practices. *Pakistan Journal of Education*, 39(1), 55–72.
- Verhoeven, L., & van Leeuwe, J. (2008). Prediction of the development of reading comprehension: A longitudinal study. *Applied Cognitive Psychology*, 22(3), 407–423. <https://doi.org/10.1002/acp.1414>
- Wiliam, D., & Leahy, S. (2015). *Embedding formative assessment: Practical techniques for K–12 classrooms*. Learning Sciences International.
- Yu, S., Zhou, N., Zheng, Y., Zhang, L., Cao, H., & Li, X. (2020). Evaluating the effectiveness of L2 writing feedback: Student perspectives. *Language Teaching Research*, 24(4), 1–23. <https://doi.org/10.1177/1362168819896491>
- Zelenska, L., & Kondra, O. (2022). Formative assessment as a tool for improving students' learning outcomes. *Education Sciences*, 12(4), 267. <https://doi.org/10.3390/educsci12040267>