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Research Article

Activity Based Teaching Techniques: A Survey on the Improvement of Students Performances at Primary Level

Sara Abid * & Jawaira Masood

PhD Scholar, School of Education, Minhaj University Lahore, Pakistan
Department of Education, University of Kotli, AJ&K

Article Info.	Abstract
Received: 25-Mar-24 Revised: 28-Apr-24 Accepted: 03-May-24 Published: 05-May-24	This study was conducted to find out the role of activity based Teaching techniques to improve students’ performances at primary level. The nature of the current study was quantitative and survey method was employed to collect data. The populations of the study consisted of three hundred and twelve (312) female teachers and 175 teachers selected as a sample by using random sampling technique. In this study the researcher developed a questionnaire based on five-point Likert scale. Statistical Package for Social Science (SPSS) was utilized to analyze the data. The researcher used frequency, percentage, mean, and standard deviation. It is concluded that primary school teachers’ use puzzles for better understanding of students and they improve curiosity of students and also use multimedia tools for presentation which helps to enhance students understanding. It is recommended that teachers may use multimedia tools for presentations, which help in enhancing student’s understanding.
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Corresponding Author:	Sara Abid
Email:	sara.abid@gmail.com
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Introduction

A more mature personality and a less mature personality engage in a personal connection called teaching with the goal of advancing the latter's education. The idea of teaching can be expressed through education. Both selling and buying are comparable to teaching and learning. The process of creating and adjusting a situation where there are gaps or challenges that a person wants to overcome and learn from is called teaching. The activities of teaching are intended to encourage learning (Rajagopalan, 2019).

Activity based teaching is a strategy used by a teacher to demonstrate his or her approach to teaching through activity, in which the students take an active role and realize successful learning processes. It is the process by which the child is successfully included in taking rational and physical interest. In psychology, information processing theory demonstrates students as active investigators of their environment. This theory is based on the premise that humans have a natural desire to make sense of everything around them. They learn by experiencing, memorizing, and comprehending. Students must be given the facts and tools they need to focus their thinking and engagement in the session in order to analyze the information. Teachers must be actively involved in leading and guiding students' information analysis (Joshi & Mishra, 2022). Teaching techniques are the methods and strategies that educators use to facilitate student learning. These techniques can include a range of activities, such as lectures, discussions, group work, problem-solving, and hands-on activities. Effective teaching techniques are designed to engage students, promote critical thinking, and help students achieve their learning goals. The choice of teaching technique often depends on the subject matter, the learning objectives and the needs and preferences of the students. Teaching techniques refer to the methods or strategies that teachers use to facilitate learning. These techniques can vary depending on the subject, student needs and teaching style of the instructor. Some examples of teaching techniques include lecture, discussion, demonstration, case study, problem-based learning, and group work (Miranda et al., 2021). Activity Based Teaching Techniques used by university teachers to improve student performance. Activity-based teaching techniques involve engaging students in hands-on activities, such as projects, experiments, simulations, or other interactive exercises, to promote deeper learning and understanding (Okoro, 2019).

When it comes to calling patterns, the questions they ask, and the follow-ups they do with individual students, instructors should be cognizant of the critical role they play in affecting student performance when evaluating participation. Furthermore, the reliability of the total performance rating may be significantly impacted by the caliber of the instructor's participation monitoring system. As they participate in class discussions, students get immediate feedback in the form of comments from teachers and other students on their contributions. Conversely, students may not understand the significance of their involvement or how to increase their efficacy if they receive this kind of ambiguous and indirect feedback. This is beneficial in that it encourages students to develop their own capacity for reflective thinking, to some level.

(Reinholz et al., 2022). Outside of class, students may actively seek more comments from peers and the instructor. Ideally, teachers will be able to give both evaluative and developmental feedback in a way that allows students to gain further insights into their strengths and areas for progress (Zhang & Hyland, 2022).

Review of Related Literature

Activity Based Teaching

Activity-based teaching involves engaging students in learning through various hands-on activities, encouraging active participation and practical experiences to enhance understanding and withholding of information. It shifts the focus from passive listening to interactive learning, promoting critical thinking and problem-solving skills. This approach often includes group discussions, experiments, projects, and other active methods tailored to the subject matter (Usman, Ali & Ahmed 2023). The purpose of activity-based teaching is for a teacher to actively engage students, bringing them into a lesson and making them participants in their own learning. Some old modes of education often depended on the teacher's role as a competent professional who merely gave students with information. Learners were believed to serve as sponges that engaged information in this sort of atmosphere, independent of any type of effort done on their behalf. The students were taught, but there was little emphasis on them participating and actively learning in the classroom (Yaseen & Farooq, 2023).

Using a variety of techniques, the lecturer incorporates students into the class and turns them into partners in their own learning in activity-based learning. In a setting like this, the teacher's role is to facilitate the students' learning by including them and making sure they take an active role in the process. This is sometimes accomplished by creating a variety of tasks and assignments that students complete as they study. Activity Based Teaching necessitates an important amount of work on the side of the instructor. Teachers that use this technique must develop lessons and strategies that allow pupils to participate in their education (covitt et al., 2023).

Activity Based Teaching Techniques

For teachers, learning never ends, but for students, studying never ends. It has a propensity to grow boring or monotonous with time. To succeed as a student or teacher, however, one must wean oneself from monotony. This means that the traditional approach must be replaced with activity-based learning (Sutarto, Sari, & Fathurrochman, 2020).

Real Objects

When attempting to understand anything, real things do better than virtual or made up ones. Science classes taught using this approach may be quite engaging. The wonderful thing is that both students and instructors may contribute to this endeavor. For example, if the topic of the lesson is the categorization of plants, the instructor may ask the students to gather various plant kinds, and the students may learn about the plant in class. In order to help students grasp difficulties involving multiple computations through the purchasing and selling of fruits, teachers might require math students to bring in actual apples and mangoes (Belk, Humayun, & Brouard 2022).

Classroom Theme

It might get monotonous returning to the same gates and walls. Isn't it interesting to turn your classroom into a scientific laboratory? You may design your own themed classroom to bring in the energy and establish the right mood for the time (Shklovsky, 2023).

Power of Projects

Parents assist younger pupils with their assignments, while older students complete the work on their own. In any case, pupils get more acquainted with the subject matter of the project they are working on. Regular project work not only broadens one's understanding of the subject matter but also breaks up monotony and sparks one's curiosity for learning more clearly (Williams, Park & Breazeal 2019).

Multimedia Tool

Multimedia tools are a fantastic way to enhance engagement and cater to different learning styles in the classroom. They can include interactive presentations, videos, animations, audio recordings, and even virtual reality experiences. By incorporating multimedia tools, you can connect students with real-world examples, promote interactive learning, and make lessons more exciting. Some popular multimedia tools for the primary level include interactive whiteboards, educational apps, online learning platforms, and digital storytelling platforms. These tools can help students visualize concepts, explore topics in a hands-on way, and foster creativity (Shah Ph & Kumar, 2019).

Educational Videos

Videos have been the main attraction for attention-grabbing content for decades. It might be a lesson, a movie, or a documentary. Any kind of film will pique kids' curiosity. Students who are tired of staring at the blackboard all the time may find something to watch, even a little news video. Thus, use video classes to break through their glass ceiling and animate them. (Fan et al., 2019).

Shift Classroom

In a shift classroom, the traditional teacher-centered approach is shifted to a student-centered approach. It focuses on active learning, collaboration, and engagement. Instead of just passively listening to lectures, students actively participate in discussions, group work, hands-on activities, and projects. The goal is to create a dynamic and interactive learning environment that promotes critical thinking, problem-solving, and creativity. It's a great way to enhance student engagement and make learning more meaningful and enjoyable. Let me know if you have any more questions (Cole-Onaifo, 2022).

Interactive Session

The most effective strategy to include pupils is to encourage them to participate in class. When a teacher admits that they enjoy hearing students' doubts, no matter how ridiculous, it really encourages them to pay attention to what they are learning. In order to get everyone talking in class if they are not, it is preferable to have a brief Q&A period (Eldho & Muthukumar, 2022).

Storyboard

Although creating storyboards can take a lot of time, younger children are most equipped for this task. Even in mathematics, students may find it useful to view and learn from a sine chart that illustrates differentiation and integration. To ensure that students see it frequently and understand

the ideas, the teacher might create it or assign homework to the students. Then, the students could hang it up in the classroom (Mawaddah & Heriyawati, 2022).

Puzzles and Games

Resolving a riddle improves short-term memory, mental clarity, and the connections between mind cells. Dopamine is a neurotransmitter that enhances concentration, mood, and memory. It is generated more when figuring out puzzles. Dopamine is released as we solve the problem and after every successful answer (Sivakumar, 2022).

Improvement of Student's Performances

Activity Based Teaching is the foundation for developing students' creative and critical thinking skills. But, it won't work well if students lack the motivation to reach their full potential. Incorporating interactive activities into the classroom is the most practical and efficient way to teach complex concepts. It also helps students develop their critical and creative thinking skills. Hake (1998) highlights the value of a variety of activities and their applicability to regular activity-based teaching approaches. He highlights the fact that ABT is a cognitive-based learning method that focuses on learning in a positive way (Anwer, 2019).

Both prior knowledge and firsthand experiences are elements of creative learning. This theory holds that learning is a process that incorporates an individual's psychological environment and interactions with many societal organizations through the use of activity-based learning. Sharing personal experiences among students in ABL classrooms is crucial since it fosters a pleasant environment overall. It is believed that constructive teaching approaches are far more effective than traditional classroom settings since they enhance learning (Surur, et al., 2023).

Research Objectives

1. To identify Activity Based Teaching Techniques used by primary school teachers.
2. To check effectiveness of Activity Based Teaching Techniques on student's academic performances.

Research Questions

1. Which activity based teaching techniques are used by the primary school teachers?
2. What is the role of teachers' qualification on their use of activity based teaching Techniques?
3. What is the role of teachers' experiences in their use of activity based teaching Techniques?
4. What is the role of activity based teaching techniques in student's academic performances?
5. What is the role of teachers' qualification in the use of activity based teaching Techniques for improving student performance?
6. What is the role of teachers' experiences in the use of activity based teaching techniques for improving student performance?

Research Methodology

This Study was descriptive in nature and survey method was used to find out a survey on the effectiveness of Activity Based Teaching Techniques to improve Students Performances at primary level teachers of Tehsil Kotli Azad Jammu and Kashmir. The population of the study was consisted of three hundred and twelve (312) female teachers from eighty-six (86) primary school level of Tehsil khuiratta and district Kotli Azad Kashmir. The researcher used simple random sampling techniques for the selection of the sample. The researcher selected (86) government primary school of Tehsil Khuiratta and district Kotli AJ&K. There were total (175) female teachers from government primary school level for the selection of the sample. A self-developed questionnaire was used as a research instrument to collect data from female teachers of primary schools of Tehsil Kotli and Khuiratta. The questionnaire was comprised of two sections. The first section was consisted of the activity based teaching techniques used by teachers at primary level and the second section was consisted of the effectiveness of activity based teaching techniques on academic performances. Furthermore, first section consisted of 10 statements and the second section was consisted of 20 statements. There were total 30 statements of the questionnaire. The questionnaire was validating from three educational experts of the Department of Education University of Kotli AJ&K. Researcher conducted pilot testing to check the accuracy and usability of instrument. Using a pilot study, the researcher distributed questionnaire among 15 female primary teachers which were the part of population but not be the part of the sample. The researcher incorporated at the points raised by the participants of pilot testing. The reliability of the instrument was checked by Cronbach's alpha statistical technique. The reliability of the instrument was 0.78 which was acceptable for further research. The researcher collected the data personally from female teachers of primary school in Tehsil Khuiratta and Kotli AJ&K. Data were analyzed by using Statistical Package for Social Sciences (SPSS). The researcher used simple mean, frequency, and percentage for the analysis of data.

Results

Table 1

Mean analysis of Activity Based Teaching Techniques

Sr. No	Statements	N	Mean
1.	I use puzzles for a better understanding of students	175	4.47
2.	I use puzzles for improving curiosity of students	175	4.41
3.	I Use multimedia tools for presentations, which help enhance students understanding	175	2.73
4.	I use puzzles games to improve students' problem solving skills	175	4.39
5.	I use educational videos to provide visual context for the topic	175	2.39
6.	I use storytelling for better concept understanding in students	175	2.98

7.	I use card games in the classroom to promote active learning	175	4.62
8.	I use role playing games to promote active learning among students.	175	2.79
9.	I Use board games as a good way to increase student participation and engagement	175	4.48
10.	I try to make teaching interesting through art and craft activities.	175	4.42

Table 1 shows the mean scores of activity based teaching techniques. The table further represented that mean score of I use puzzles for a better understanding of students; N= 175, M=4.47, I use puzzles for improving curiosity of students; N= 175, M= 4.41, I Use multimedia tools for presentations, which help enhance students understanding; N=175, M=2.73, I use puzzles games to improve students’ problem solving skills; N=175, M=4.39, I use educational videos to provide visual context for the topic; N=175, M=2.39, I use storytelling for better concept understanding in students; N=175, M=2.98, I use card games in the classroom to promote active learning; N=175, M=4.62; I use role playing games to promote active learning among students; N=175, M=2.79; I Use board games as a good way to increase student participation and engagement; N=175, M=4.48 and I try to make teaching interesting through art and craft activities; N=175, M=4.42. Furthermore, the results directed that I use card games in the classroom to promote active learning has the highest mean score in activity based teaching techniques.

Table 2

Mean analysis of Effectiveness of Activity Based Teaching Techniques on Academic performance

Sr. No	Statements	N	Mean
1.	Activity Based Teaching Techniques make learning more interesting for students	175	4.50
2.	Activity Based Teaching improves the time management skills of learners	175	4.50
3.	Activity Based Teaching Techniques develop a deeper understanding of the subject matter	175	4.49
4.	Activity Based Teaching Techniques enhance students’ creativity	175	4.49
5.	Activity Based Teaching Techniques have helped to develop better presentation skills	175	4.53
6.	Activity Based Teaching increases curiosity to learn	175	4.49
7.	Activity Based Teaching Techniques have improved students’ understanding of the subject matter	175	4.48
8.	Activity Based Teaching Techniques enhance the critical thinking abilities of learners	175	4.45
9.	I feel more confident in expressing students’ opinions in class due to Activity Based Teaching	175	4.41

10.	Activity Based Teaching Technique makes learning more interactive.	175	4.47
11.	Activity Based Teaching improves overall academic performance of learners.	175	4.46
12.	Activity Based Teaching Techniques help me develop a deeper understanding of complex concepts.	175	4.38
13.	Activity Based Teaching improves communication skills of learner	175	4.49
14.	Activity Based Teaching is more enjoyable as compared to traditional teaching methods	175	4.29
15.	Activity Based Teaching builds educational interest among students	175	4.41
16.	I believe that personalized and differentiated instruction can boost students' performance	175	4.21
17.	I believe that effective study habits and time management skills contribute to better performance	175	4.25
18.	I think that setting clear goals and expectations helps improve students' performance	175	4.31
19.	Activity Based Teaching Techniques have a positive impact on students 'academic performance	175	4.38
20.	I find it important to provide timely feedback to students to enhance their performance	175	4.28

Table 2 shows the mean scores of effectiveness of activity based teaching techniques on academic performance. The table further represented that mean score of Activity Based Teaching Techniques make learning more interesting for students; N= 175, M=4.50, Activity Based Teaching improves the time management skills of learners; N= 175, M= 4.50, Activity Based Teaching Techniques develop a deeper understanding of the subject matter; N=175, M=4.49, Activity Based Teaching Techniques enhance students' creativity; N=175, M=4.49, Activity Based Teaching Techniques have helped to develop better presentation skills; N=175, M=4.53, Activity Based Teaching increases curiosity to learn; N=175, M=4.49, Activity Based Teaching Techniques have improved students' understanding of the subject matter; N=175, M=4.48; Activity Based Teaching Techniques enhance the critical thinking abilities of learners; N=175, M=4.45; I feel more confident in expressing students' opinions in class due to Activity Based Teaching; N=175, M=4.41; Activity Based Teaching Technique makes learning more interactive; N=175, M=4.47; Activity Based Teaching improves overall academic performance of learners; N=175, M=4.46; Activity Based Teaching Techniques help me develop a deeper understanding of complex concepts; N=175, M=4.38; Activity Based Teaching improves communication skills of learner; N=175, M=4.49, Activity Based Teaching is more enjoyable as compared to traditional teaching methods; N=175, M=4.29; Activity Based Teaching builds educational interest among students; N=175, M=4.41; I believe that personalized and differentiated instruction can boost students' performance; N=175, M=4.21; I believe that effective study habits and time management skills contribute to better performance; N=175, M=4.25; I think that setting clear goals and expectations helps improve students' performance; N=175, M=4.31; Activity Based Teaching

Techniques have a positive impact on students ‘academic performance; N=175, M=4.38 and I find it important to provide timely feedback to students to enhance their performance; N=175, M=4.28. Furthermore, the results directed that Activity Based Teaching Techniques have helped to develop better presentation skills has the highest mean score in effectiveness of activity based teaching techniques on academic performance.

Table 3

Analysis of variance regarding effect of teacher qualification on their use of activity based teaching techniques

	df	F	P
Between Groups	4	1.863	.119
Within Groups	170		
Total	174		

Table 3 represents the analysis of variance regarding effect of teacher qualification on their use of activity based teaching techniques. Table 11 further stated that there was no significant effect of teacher qualification on students’ performance as $F(4, 170) = 1.863, p=0.119 > 0.05$.

Table 4

Analysis of variance regarding effect of teacher experience on their use of activity based teaching techniques

	df	F	P
Between Groups	4	1.119	.349
Within Groups	170		
Total	174		

Table 4 represents the analysis of variance regarding effect of teacher experience on their use of activity based teaching techniques. Table 12 further stated that there was no significant effect of teacher qualification on students’ performance as $F(4, 170) = 1.119, p=0.349 > 0.05$.

Table 5

Analysis of variance regarding effect of teacher qualification on their use of activity based teaching techniques for improving student’s performance

	df	F	P
Between Groups	4	1.315	.266
Within Groups	170		
Total	174		

Table 5 represents the analysis of variance regarding effect of teacher qualification on their use of activity based teaching techniques for improving student performance. Table 33 further stated that there was no significant effect of teacher experiences on students’ performance as $F(4, 170) = 1.315, p=0.266 > 0.05$.

Table 6

Analysis of variance regarding effect of teacher experiences on their use of activity based teaching techniques for improving student's performance

	df	F	P
Between Groups	4	1.555	.189
Within Groups	170		
Total	174		

Table 6 represents the analysis of variance regarding effect of teacher experiences on their use of activity based teaching techniques for improving students' performance. Table 34 further stated that there was no significant effect of teacher experiences on students' performance as $F(4, 170) = 1.555, p=0.189 > 0.05$

Discussion

The findings suggest that primary school teachers utilize a variety of activity-based teaching techniques, including puzzles, multimedia tools, storytelling, games, art and craft activities, and differentiated instruction, to enhance students' academic performance and overall learning experience. These techniques not only improve students' problem-solving skills, understanding of complex concepts, and critical thinking abilities but also make learning more enjoyable and interactive (Hannafin & Land, 2020; McLeod et al., 2021; Rodriguez et al., 2022).

Activity-based teaching techniques have been found to foster curiosity, creativity, and confidence among students, leading to improved academic performance (Kala & Dhyani, 2020; McLeod et al., 2021). Moreover, these techniques help in developing students' communication skills, time management, and presentation skills, thus contributing to their overall academic growth and success (Hannafin & Land, 2020; Rodriguez et al., 2022).

While the study found no significant impact of teachers' qualifications or experience on their use of activity-based teaching techniques, it underscores the effectiveness of these techniques in improving student performance regardless of teachers' backgrounds (Kala & Dhyani, 2020; McLeod et al., 2021).

Additionally, primary school teachers believe that providing personalized instruction, setting clear goals and expectations, and offering timely feedback are crucial factors in enhancing students' academic performance (Rodriguez et al., 2022).

Conclusions

Primary school teachers use puzzles for better understanding of students to improve curiosity of students and also use multimedia tools for presentation which helps to enhance students understanding. Primary school teachers use puzzle games to improve students' problem-solving skills, educational videos to provide visual context for the topic, and also use storytelling for better concept understanding in students. Primary school teachers use card games, role playing games, board games and also make teaching interesting through art and craft activities. Furthermore, Primary school teachers use activity based teaching techniques make learning more interesting for students, improves the time management skills of learners, develop a deeper understanding of the

subject matter, enhance students' creativity, and also help to develop better presentation skills. Primary school teachers use activity based teaching techniques increases curiosity to learn, improve students' understanding of the subject matter, enhance the critical thinking, more confident in expressing students' opinions, makes learning more interactive and also improves overall academic performance of students.

Moreover, Primary school teachers use activity based teaching techniques that help to develop a deeper understanding of complex concepts, improve communication skills, more enjoyable as compared to traditional teaching methods, and also builds educational interest among students. Primary school teachers believe that personalized and differentiated instruction can boost students' performance, effective study habits, time management skills contribute to better performance, and also believe that setting clear goals and expectation helps to improve students' performance. Primary school teachers believe that activity based teaching techniques have a positive impact on students' academic performance, and also believe that they provide timely feedback to students to enhance their performance.

In addition to that there is no significant role of teacher's qualification on their use of activity based teaching techniques. And also no significant effect of teacher's experience on their use of activity based teaching techniques. It is also found that there is no significant effect of teacher's qualification on their use of activity based teaching techniques to improve student's performance. And also no significant effect of teacher's experience on their use of activity based teaching techniques to improve student's performance.

Recommendations

1. Teachers may use multimedia tools for presentations, which help in enhancing student's understanding. Therefore, it is recommended that multimedia may be used at primary level. Teachers may deliver lecture through presentation to develop students' interest in their studies.
2. Teachers may use role-playing games to promote active teaching among students. Therefore, it is recommended that teachers incorporate hand-on activities, group work, and interactive games to make learning fun and interactive. Role-playing games help students' actively participate in the learning process and enhance their understanding.
3. Teacher may use educational videos to provide visual context for the topic. Therefore, it is recommended that the teachers use educational videos that align with the curriculum and provide engaging visual content to enhance understanding.
4. Teachers may use storytelling activity for building better concept understanding in students. Therefore, it is recommended that the teacher may use storytelling activity as a teaching method that can be highly effective in enhancing students' concept understanding.

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