

Exploring the Impact of Activity-Based Learning on Academic Performance of Elementary School Students

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Abstract

This study explores the impact of activity-based learning (ABL) on the academic performance of elementary school students in Karachi, Pakistan. By focusing on teachers' perspectives, the research examines how ABL influences student motivation, engagement, and academic achievement compared to traditional methods. Data were collected through semi-structured interviews with eight elementary school teachers, using a phenomenological approach to gain in-depth insights. The findings indicate that ABL significantly enhances student engagement, facilitates better retention of knowledge, and fosters the development of critical thinking skills. Teachers observed that students became more motivated and confident as they participated in hands-on activities, which helped them connect classroom content to real-life applications. Despite the positive outcomes, the study also identified barriers such as resource limitations, time constraints, and classroom management challenges that hinder the effective implementation of ABL. The study concludes by emphasizing the need for adequate teacher training, resources, and support to maximize the benefits of ABL in elementary education.

Keywords: *Activity-Based Learning, Academic Performance, Student Engagement, Motivation, Elementary Education*

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Introduction

Nowadays, schools are implementing activity-based learning, which has proven to be an effective teaching method in the fields of science, engineering, and health. By teaching children how to learn through a variety of activities, this method incorporates learning into what they already know. Instead of only didactically imparting knowledge and figures, instructors using Activity based learning must also coach, encourage, enable, and facilitate learners. In education, there is an unbreakable bond between teaching and learning. Students receive the necessary knowledge through education. This material aids persons in acquiring the skills and knowledge required for gainful employment and positive societal influence. Instructors have a critical role in ensuring that children receive accurate information and in establishing reasonable expectations for their pupils. They need to possess expertise and understanding of the subject. For students to develop sharp insights and critical thinking abilities, information should be presented in an objective and innovative way (Albadi & David, 2019).

Activity-based instruction promotes learning by doing. It involves students actively in the process of instruction and learning. "Activity-based learning" is a learning method where students are continuously involved (Harfiel et al., 2007). Anwer (2019) defines activity-based learning as a setting where students actively participate in the learning process rather than acting as passive recipients of information. This method teaches students how to learn by exposing them to a variety of activities and integrating learning into their existing knowledge.

According to Ericksen (1978), "Effective learning in the classroom depends on the teacher's ability to maintain the interest that brings students to the course in the first place." Enhancing student retention in the classroom requires effective instruction. To ensure that students enjoy the course and meet their objectives, teachers must adjust to the changing needs of the classroom. A strategy known as "activity-based learning" involves students in the process of teaches (Yaseen & Farooq, 2023). Students that engage in activity-based learning actively participate in the process as opposed to listening passively. By requiring students to actively participate in class and collaborate with one another in the learning environment, active learning varies from traditional teaching approaches (Okoro, 2019). Through two crucial elements, activity-based learning focuses on fostering a supportive learning environment in the classroom. Activity-based learning, according to Churchill (2003), aids students in developing developmental models that permit higher-order performance, such as problem-solving and skill transfer.

The development of creativity and critical thinking abilities requires activity-based learning. But this tactic won't work if pupils aren't motivated. Interactive activities are the cornerstone of Activity Based Learning and are the most efficient means of imparting knowledge to pupils on difficult subjects. Students' critical thinking and creativity are enhanced by a variety of classroom activities. The importance of a variety of activities in activity-based learning approaches (Hake, 1998). He describes activity-based learning as a cognitively based approach that encourages positive learning. Personal experiences are combined with prior knowledge in constructive learning. A person's psychological environment and interactions with societal systems combine to form their learning process. In schools using activity-based learning, sharing personal experiences fosters a supportive learning atmosphere. When compared to traditional classroom settings, constructive teaching methods yield better learning outcomes (Anwer, 2019).

Activity based learning develops creative thinking skills. Using problem-solving games and activities is a great way to get children thinking outside the box (Nwoke, 2021). Building these creative and reasoning skills is important as children progress through school. Due to lack of resources and barriers of implementation it is difficult to apply activity-based learning in classrooms. The study was conducted to determine the effectiveness of activity-based learning on student's academic achievements. Activity based learning specific goal is to find out how involving students in interactive, hands-on activities influences their academic performance in a variety of subjects and grade levels. The goal of this study is to gain a deeper understanding of how activity-based learning enhances student learning outcomes and influences instructional practices in elementary school.

Activity Based Learning

All subject areas benefit from activities-based learning. Practical learning enhances comprehension. Activity-based ethics typically come up. It boosts a child's self-esteem. It makes working alone and in group's easier (Arioder et al., 2020). Children inspire others when they use their imaginations, skills, and ingenuity to solve challenges. The activity-based strategy is the one that is focused on learning. Activities-based instruction aids in student's social skill development by utilizing constructive and cooperative labour. It stimulates people's creativity (DEEUDOM & Jantarach, 2023). It encourages work-life balance and makes use of student-friendly teaching resources. Children learn in a more active way than adults. First, employing activity-based teaching approaches, the child actively engages in his own education and learns by doing. Teachers use role-playing games, experiments, puzzles, flash cards, and three-dimensional models to keep the child engaged. The subjects and levels of each grade vary, and a student's level

of participation dictates how much they learn. Teachers can utilize the activity method to demonstrate their pedagogical approaches by including students in activities in which they actively engage and learn from (Konopka, et al., 2015).

In the field of education, teachers are essential because they offer students of all ages a wide variety of learning styles and approaches. They illuminate every student and support them in enhancing their unique skill sets in the classroom. In addition to teaching, teachers must inspire students to learn outside of the classroom. Students are more engaged and interact in class when they grasp the material, which is ultimately up to the teacher (Barkley & Major, 2020). Teachers can help students understand new concepts by implementing various teaching tactics. To improve student understanding, integrate instructional tactics with their aims and make the product evident. Interaction between students and teachers improves classroom learning and communication skills. Interaction and communication between teachers and students is the most efficient strategy to enhance learning. Since they are given the opportunity to communicate spontaneously rather than just memorize responses, students are expected to generate more as a result of these meetings. Promoting candid conversations among students in the classroom enables them to learn from people with a range of experiences and perspectives. Facilitating student interaction also requires active strategy. According to Chafe (1998), emphasizing cooperative learning over individual learning encourages communication and involvement, which is a successful learning strategy, as opposed to competition-based outcomes and goals. Through interactive learning, students can collaborate with classmates from diverse backgrounds in teams and groups. This improves the element of variation and increases the students' learning and idea-sharing chances. This not only maximizes student participation and output but also creates a stimulating and encouraging learning environment (Wright & Lander, 2003).

One of the hardest jobs is teaching. Teachers may find it difficult to establish a good rapport with their students, which makes it more difficult to motivate them in a constructive way. Teachers must employ a variety of instructional strategies and tactics to engage even the most difficult students. Several studies agree that motivation is a critical factor in the results of teaching and learning because it pushes people in a certain direction (Sottolare, DeFalco & Connor, 2014). The truth is that no matter how excellent any instructional program is, learning will be no greater than the student's level of motivation. Teachers need to know what drives their students, regardless of the level of education. When developing their lesson plans, homework assignments, and group projects, educators must put incentive first. Pintrich (2003) highlights how crucial student motivation is. Teachers need to understand that students from different backgrounds require different

kinds of motivation. Since some students may behave passively in class, it's important to pique their attention. Teachers can boost student enthusiasm by making the learning environment engaging and fun. Teachers have considered the advantages and disadvantages of traditional and alternative teaching methods.

According to Teo and Wong (2000), prior knowledge use and innovation-fostering are less successful using standard teaching approaches. Activity-based learning is useful in encouraging students to study using a variety of tactics and activities (Wood, 1998). At all educational levels, activity-based learning fosters in pupils the development of self-direction and critical thinking skills necessary for problem resolution. Education professionals work together with students to recognize and resolve issues. To improve comprehension, it's important to minimize barriers and maintain an open discussion with stakeholders. Understanding students' needs and expectations improves interaction and communication. Teacher training enhances student learning outcomes. Training teachers enhances their ability to implement individual and community improvement efforts. This will improve motivation, critical thinking, and creativity for both teachers and students (Abebe & Woldehanna, 2013).

Motivation

One of the most significant potential benefits of activity-based learning is increased student motivation. Traditional methods, which rely on passive listening and rote memory, can often result in disengagement and boredom. In contrast, activity-based learning promotes a learner-entered environment in which students actively participate in the development of knowledge. According to Quin (2012) and Deci & Ryan (2000), students' intrinsic motivation is increased by activity-based learning activities that provide them a sense of autonomy, competence, and relatedness. Examples of these activities include collaborative learning, problem-based learning, and inquiry-based learning. Activity-based learning is the cornerstone for the growth of critical and creative thinking skills. But this strategy won't work if pupils aren't driven to realize their own potential. The most effective and efficient way to teach complex subjects is to include students in interactive activities; this is also the basis of activity-based learning. Diverse classroom activities foster students' critical thinking and creativity (Kanchana, 2019).

Real-Life Experiences

Teachers give students the chance to apply the academic knowledge they have learned in the classroom to real-world problems and scenarios by using activity-based learning. Students benefit greatly from activity-based learning because it increases motivation and interest in learning while fostering active engagement. Engaging in activity-based learning gives students the confidence to apply their knowledge and abilities

in ways that will advance their careers. That is why it is critical for teachers to use real-world examples in their lessons. The advantages are twofold: first, students become more motivated and engaged when they see how their teachings apply to their daily life. The curriculum becomes more practical, effective, and realistic. Second, it encourages critical thinking, as life is frequently more complex than what is taught in the classroom. Too frequently, school focuses on memorizing and repeating rather than really applying information and material (Yeung, 2004).

It's an antiquated formula from a time when pupils were expected to merely sit and listen. As you are probably aware, this approach differs significantly from modern higher education and working contexts, which prioritize cooperation, communication, and community. Incorporating real-world examples and links into classroom instruction helps students understand why the material they are learning has application outside of the classroom. Students get to see how knowledge may be applied in the real world and how it impacts their circumstances right now. Establishing a connection between classroom instruction and real-world experiences fosters critical thinking, unorthodox thinking, and increased engagement. Unlike the one-track linear strategy that is frequently utilized in education, it fosters a holistic way of thinking by connecting teachings to other subjects (Samaddar, & Sikdar, 2023).

Barriers to Implementation

As mentioned earlier, a number of instructional methodologies make use of activity-based learning in the classroom. Therefore, implementation challenges vary according on the kind of work that kids are given. Nevertheless, a number of studies have shown a few typical obstacles that keep activity-based learning from occurring in elementary schools. Poor arguments harmed discussions, and students offered assumptions rather than facts (Bransford, Brown, & Cocking, 2000). Additionally, when the students are engaged in any kind of activity, a personal attack is observed. Furthermore, it should be noted that group activities frequently give the impression that there are only two possibilities available, when in reality, there may be more. Teachers struggle to create a conducive environment for activity-based learning, which makes students feel more uncomfortable than engaged in the activities. Pivec & Pivec (2011) pointed out that teachers don't have the skills needed to conduct an exercise like this in a proper manner. The goal of activity-based learning is undermined when students lack the understanding of discrete stages of diverse activities, which is necessary to achieve good results. They also talked about how difficult it is for teachers in elementary schools to supervise the recording of their lessons. Despite this, several studies discovered that students learned useful abilities from games that they could use in their coursework and in the real business world (Anandalakshmy et al., 2007).

It was also pointed out that teachers don't have the skills needed to conduct an exercise like this in a proper manner. The goal of activity-based learning is undermined when students lack the understanding of discrete stages of diverse activities, which is necessary to achieve good results. They also talked about how difficult it is for teachers in elementary schools to supervise the recording of their lessons. Activity-based learning also puts classroom discipline at risk, claim Pivec & Pivec (2011). The students would get insecure as a result of their arguments. Unfair situations may occur during the activations, and an adverse reaction may occur in someone. Your veins and body language could make the other member angry, which could lead to an unjust situation. Moreover, several jobs require a substantial time and financial commitment. Furthermore, some students might be reluctant to take part in these activities because they are not performers. Social standing is another barrier to role-playing. Pupils from different backgrounds and social contexts could be reluctant to engage in group activities. In addition, the lack of resources in educational institutions in third-world countries like Pakistan makes organizing and staging such events difficult. Another barrier to implementing some of these activities in Pakistan's elementary schools is that they require the use of technology.

Material and Methods

This qualitative phenomenological study explores the perspectives of elementary school teachers regarding the impact of activity-based learning (ABL) on student academic performance in Karachi, Pakistan. The research aims to uncover teachers' lived experiences and their perceptions of ABL's role in enhancing academic outcomes at the elementary level. The researcher aimed to elicit detailed, in-depth information on these perceptions by using semi-structured interviews, a well-established qualitative research method to gather detailed, personal information (Creswell et al., 2011; Walsham, 1995). In accordance with phenomenological principles, the research concentrates on how educators perceive and interpret their experiences with ABL in their classrooms. The study's population comprises teachers working in elementary schools in Karachi, with a focus on those who have implemented ABL in their teaching practices. This study employed a convenience sampling method, which is typical of qualitative research, wherein the investigator chooses the subjects that are easily available to them (Creswell & Creswell, 2017; McMillan & Schumacher, 1997). Ten respondents were chosen, 2 of whom will undergo pilot study and 8 take part in the main study. The sample size selected suits the suggested sample of qualitative researches, which is usually one to twenty people (Fraenkel, Wallen, and Hyun, 2012; Cohen, Manion, & Morrison, 2007).

Semi-structured interviews were used in data collection which permitted the flexibility and richness of the answers but kept the research questions in focus. The interviews were aimed at getting the attitude of teachers towards the role of ABL in

enhancing student performance and the impact of ABL on student engagement. To determine the validity and relevance of interview items, the researcher made an interview protocol which had open ended questions and prompts after consulting the experts in the field. The interviews were 20-35 minutes, which is justified by the qualitative research principles (Fraenkel et al., 2012; Cohen et al., 2007; Creswell, 2014), and were recorded and transcribed word-to-word to reflect the responses of the participants as accurately as possible. Following a phenomenological research design, thematic analysis was used in data analysis in order to determine the main themes that were drawn out of the interviews. The researcher thoroughly transcribed the interviews and forwarded them to the respondents to enable them authenticate the veridicality of the transcripts. Not only did this enhance the validity of the information, but it also helped in the accurate representation of the voices of the participants (Maxwell, 2013). To increase the strength of the findings, the researcher used data triangulation, comparing answers of different participants to guarantee consistency as well as to investigate different points of view on ABL. The data analysis consisted of coding and organizing the data into themes and refining the themes to give a clear picture of the perception of teachers.

The study took care of the reliability and validity of the study in accordance with Creswell (2014) and Creswell and Creswell (2017). Peers and experts were involved in the coding process to check the inter-coder reliability which was above the recommended limit of 80 percent which guaranteed consistency and accuracy in interpreting the data (Patton, 1990). The results were obtained through the identification of key themes, which were interpreted and grouped to come up with a detailed account of the experience of teachers with ABL. The study ended by giving a deep, descriptive account of the perceptions of the participants with a view of shedding light on how activity-based learning is perceived to influence student academic performances in elementary schools. The thematic analysis helped to present a systematic account in which essential ideas were clarified and teachers gained insights into how ABL was applied to the student achievements, thus making contributions to the existing body of literature on innovations in teaching in Pakistan.

Findings of the Study

The findings of the study have highlighted the following themes based on different aspects as under:

Demographics of Participants

The participants are elementary school teachers of different years of experience and teaching different grades. There is one teacher who is 3rd grade and others are teaching 4th, 5th, 2nd and 1st grades. The participants all have a rich background of classroom experience, some of them with younger students, others with upper elementary students.

The backgrounds of their teaching demonstrate a wide scope of knowledge on various levels, bringing different visions of education and ways of teaching. The perspective is the following, according to Participant 1:

"I'm 32 years old, and I teach 3rd grad."

Participant 3 explained her thoughts as follows:

"My age is 35 years, and I am the teacher of 5th grade".

When asked about, *"How many years of teaching experience do you have, and how long have you been using activity-based learning in your teaching practice?"*

The participants are different in terms of their teaching experience, with majority having taught at least several years (between 5 and 10 years). Most of them began to apply activity-based learning (ABL) in the last several years when they were using more traditional instructional approaches. Their introduction of ABL into the classroom was gradual but over time, they observed positive impacts of ABL on student motivation and engagement. Other teachers said they attended professional development workshops or tried out various activities to improve their lesson plan. ABL has resulted in better performance and skills of students in critical thinking and collaboration, and teachers have stated that they feel more confident using this approach. Most of the participants indicated that they witnessed important changes in the manner in which the students engage with lessons and memorize. As participant 4 replied in following:

"I have been teaching 6 years, and I have been using ABL during the last 2 years after a workshop I realized that students were much more enthusiastic about lessons and remembered information better".

As participant 6 response was:

"I teach 5 years, and I have been teaching ABL 3 years, and it has completely altered my teaching methods since now my students have become more proficient in critical thinking and teamwork skills".

When asked about, *"What is your educational background and any professional development related to teaching methods?"*

The respondents are of different levels of education including Bachelor degrees to Master degrees in Education with some having majors in early childhood or primary education. Some have sought professional development challenges such as workshops, seminars, and training on the activity-based learning (ABL) and teaching approaches. These professional learning activities have equipped them with useful resources to make students more engaged and involve them more in the learning processes. A number of participants indicated that they had attended special programs that enhanced their knowledge about ABL and how to successfully incorporate it into their teaching. Altogether, formal education and professional development have contributed to the continuous learning process that has helped them shape their practices in teaching and have confidence in applying ABL strategies. As respondent 7 replied:

“I am a Master’s in Education and I have also participated in a course on contemporary teaching methods whereby the course was taught on the concept of activity-based learning and this course really inspired me to change my teaching style towards being more interactive”.

Respondent no 4 replied in following:

“My degree is in Education, and I have participated in several professional development workshops on creative teacher training. The workshops prompted me to explore new methods of ensuring that lessons are more engaging to the students”.

Activity Based Learning

The concept of activity-based learning (ABL) in the classroom can be defined as a type of learning where students are actively involved in practical, interactive activities that enable them to put into practice what they have learned in a real-world situation. This approach is student-centered and students engaged in activities involving group discussion, experimentation, problem-solving, role-play and creative projects. ABL allows one to think critically, work as a team and delve deeper into the concepts as opposed to the conventional lectures and textbooks. ABL provides an interesting and dynamic learning experience by addressing various learning styles and placing an emphasis on practical uses, students are also motivated to be initiative-takers and apply classroom-learned concepts to real-life situations.

Participant 2 gave her point of view in the following terms:

“She observed in her classroom that her teacher uses both methods of assessment formative were taken weekly or monthly and summative were taken at the end of the unit or semester”.

Participant 5 shouted the view in the following statement:

“Activity-based learning in my classroom entails the application of tools such as group projects, practical experiments, and role-play situations that make the learning process more interactive and effective. It also makes students think critically and collaborate in an effort to solve problems”.

Participant 8 views about activity-based learning in following words:

“I call ABL employing activities that involve students in initiative learning whether in collaboration, projects, and interactive games. It aids students in linking theoretical knowledge to real-life experiences”.

Motivation

Activity-based learning (ABL) significantly affects student engagement and motivation as it makes the learning process more interactive and practical. Educators note that when learners are actively engaged in performing certain duties like projects, experiments, or group work, they get more excited and passionate about learning. ABL makes the students feel that they have a level of accomplishment and responsibility that

makes them interested and attentive to the subject matter. The methodology eliminates the dullness of conventional teaching techniques, making classes more fun and familiar. ABL addresses the innate curiosity of students by relating lessons to real-life examples, inspiring students to become active participants in their own learning, and boosting their motivation and interest in the classroom.

This was explained by participant 5 as below:

“When my students are informed that they will be involved in practical activities, they get motivated and feel that they are solving the real-life problems and not just watching a lecture. This feeling of contribution makes them more engaged and willing to learn”.

The views of participant 6 were as follows:

“I have observed that ABL makes students more motivated since they use their inherent curiosity when working on projects or solving real-world problems, they are able to become more active and remember the information better”.

Real-Life Experience

Activity-based learning is a good method of relating what occurs in the classroom to real life experiences by introducing practical use of knowledge in lessons. The educators employ numerous practical examples, including role playing, experiments, and real-life simulation, to enable students to connect academic knowledge to their daily experiences. As an example, students work on projects like budgeting, researching local history and writing business plans, which enable them to use their knowledge in significant ways. Such activities do not only render learning more relevant, but gives students skills that are valuable in the outside world, which they can apply in the classroom. Using real-life situations, activity-based learning fills the gap between theory and practice and improves the understanding and engagement of students. Participant no 1:

“A role-play activity was used to educate students on community helpers and this time they were the various professionals in real life like doctors, firefighters, and teachers”.

Respondent no 7 responded in the following manner:

“Students worked on a sustainability project, during which they developed a recycling plan in the school, linking environmental science lessons to their everyday life and showing them how they can impact a change”.

Barrier to Implementation

There are a number of challenges encountered in implementing activity-based learning (ABL) in the classroom. The lack of resources is one of the main barriers because

numerous activities demand certain materials that are not necessarily available. Time constraints are also major factors and teachers are not able to incorporate ABL in tight schedules. The classroom area and design may restrict the performance of group work and practical projects. Moreover, technology shortages in certain classrooms do not support the use of digital tools in the classroom. There may be uneven student engagement, as not all students may be ready to accept the transition to the new approach, or may not be able to focus on the long activities. With interactive activities, classroom management is more difficult, and the difference in the enthusiasm of the students and the level of their engagement can make it hard to make sure that every student will equally benefit as a result of ABL. All in all, these obstacles affect the potential of activity-based learning. According to the answer of respondent no 6:

“Some activities cannot always be performed in the classroom space, e.g., we may not be able to conduct group work or have hands-on experiments, and the current design restricts our ability to do it. In addition to this, some parents are not quite supportive of ABL and choose a more traditional approach, which further complicates the situation”.

Participant 2 responded in the following way:

“Time is a major obstacle: Our curriculum is already impregnable, and there are instances when we could not find time to do the activity due to the students being uncontrollable, and the behavior of the students derails the activity, making it hard to maintain a productive classroom setup”.

Overall Effect on Students Performance

The use of activity-based learning (ABL) has positively influenced the academic performance of students and teachers have claimed that it has enhanced their engagement and understanding of concepts. Learning has become more active and students are able to comprehend and put learning into practice in a more effective way than traditional learning. ABL helps students to relate classroom materials and practical real-life and achieve improved academic outcomes. Teachers note that students are more motivated, confident and enthusiastic, which makes them successful in assignments, tests and group projects. All in all, learning is enjoyable and effective, as ABL promotes deeper insight and prolongs one in terms of knowledge retention. As respondent 4 said:

“I have discovered that activity-based learning enables my students to have a better understanding of the concepts, particularly in areas such as math and science. They are

able to observe the real-world uses of what they are learning and thus they have a more significant purpose in their studies and thus more eager learners”.

No 7 is described in the following:

“ABL really matters in academic performance, students are not only memorizing something; instead, they are learning how to use it and this enhances their understanding in comparing it with traditional teaching”.

Discussion

This study has discussed how activity-based learning (ABL) can improve the academic performance of the elementary school students in Karachi, Pakistan, with respect to the views of teachers. The results show that ABL has great impact on student engagement, motivation, and long-term retention of knowledge, which results in improved academic performance. This aligns with the existing literature that highlights the beneficial role of ABL in student performance in different areas and education levels (Anwer, 2019; Hake, 1998). Among the main conclusions made in this study is the fact that ABL promotes active engagement, and, as a result, more effective information retention. The teachers stated that students who participated in activities that utilized their hands like role-plays, group projects, and experiments understood the content better than those students who were subjected to the conventional teaching methods that were based on lectures. The results are consistent with the findings of Ericksen (1978) who emphasized that active learning technique, including ABL, can lead to a deeper level of cognitive involvement and long-term recall. Not only were students able to retain information better, according to the teachers, but students were also more confident in the application of the knowledge in real-life situations.

Another study result was that ABL had a positive effect on student motivation. Educators reported that as students engaged in interactive activities and projects, they were more excited to learn and felt achievement. This motivation boost is in line with the reports of Quin (2012) and Deci and Ryan (2000) who indicated that learner-centered instructions like ABL boost the intrinsic motivation by creating a feeling of autonomy, competence, and relatedness. ABL can offer the student more dynamic learning experience by offering them the chance to be more proactive and to be actively involved in the learning process, which consequently motivates students to learn more. As far as the practical use is concerned, ABL was identified to close the gap between the theoretical and practical applications. To enable students, relate what they were learning to real life, teachers employed real-life situations like role-playing community helpers or undertaking

sustainability projects. This is in line with the study of Samaddar and Sikdar (2023) that has highlighted the need to combine real-life experiences in learning in the classroom.

As a result of relating the academic material to the real life, ABL does not only render the material more pertinent but also allows the students to develop their critical thinking abilities, as they are tempted to apply the information in different situations. Although good results have been shown, the research also presented a number of obstacles to the implementation of ABL. Lack of resources was one of the main issues teachers mentioned because most of the activities have particular materials needed, which are not always present. This observation reinforces the observation made by Pivec and Pivec (2011) who observed that the lack of school resources, particularly in developing nations, is a major problem in the execution of activity-based learning. Time was also a significant concern as teachers had a hard time incorporating ABL within the already busy school program. This is compatible with the fears expressed by McLure & Aldridge, (2022), who emphasized the time constraints teachers have to deal with when integrating ABL into their instructional plans. Also, classroom management was a problem, especially when teamwork was involved and needed to be closely monitored. As many respondents to this research stated, it can be hard to be disciplined and to keep every student occupied with such activities.

Moreover, another barrier was found to be the absence of technology in certain classrooms. Most teachers said that they would like to use digital tools in their lessons so that the activities would be more interactive, but the lack of the required technology did not allow them to do so. It aligns with the result of Goswami, Sankhyan and Singhi, (2021), who observed that technological limitations might cause the activity-based learning to be less effective, particularly in learning institutions where resources are limited. The results of this research add to the existing literature on the effectiveness of activity-based learning to enhance academic performance. Although there is a wealth of literature on the advantageous effect of ABL on student engagement and performance (Albadi, 2019), this study is valuable as it examines the perceptions of elementary school teachers in Karachi, Pakistan, in particular. The context of Pakistan, where educational resources are often limited, makes this study particularly relevant, as it sheds light on the challenges teachers face in implementing ABL in such settings. Moreover, this study also indicates that it is crucial to equip teachers with relevant training and resources to successfully apply activity-based learning, (Anwer, 2019; Nwoke, 2021).

Nevertheless, a few discrepancies with the past research were reported. Although most researchers claim that ABL helps develop critical thinking and problem-solving

abilities (Harfield et al., 2007; Hake, 1998), the present research established that teachers had a difficulty coping with different engagement levels in students. Other students, particularly those who are not highly motivated by practical activities, were not keen to participate fully in the activities. This implies that although ABL is a good method with most students, it is not necessarily as universal and useful to all students, especially those who need more structured or traditional instruction. This discrepancy underscores the importance of differentiated methods of instruction in ABL in order to support the varying learning requirements. The research offers useful information on the advantages and issues of learning with activities based on the point of view of elementary school educators in Karachi. It validates the beneficial effect of ABL on student motivation, engagement and academic performance, and also outlines major obstacles to its implementation. Future studies must seek to address how these barriers can be addressed, especially in resource constrained context and also study long term impacts of ABL on student learning outcomes.

Conclusion

This study has examined the significant effects of activity-based learning (ABL) on academic achievement among elementary school students in Karachi, Pakistan. The results show that ABL positively affects student engagement and retention by engaging students in the learning process. Educators have found that students are more successful in their academics when they are able to relate what they learn in the classroom and what they can practice in life through hands-on activities like role-playing, experiments and group projects. These activities not only enhance learning through making it more enjoyable and relevant but also enhancing the critical thinking and problem-solving abilities. Nevertheless, there are challenges associated with the implementation of ABL. The resources, time, and space in the classroom are the barriers that should be resolved in order to make the most out of ABL. Nevertheless, it can be concluded that despite these difficulties, ABL has a positive influence on student motivation, confidence, and academic results. The research paper brings to the fore the importance of continuous teacher training and resource investment that can fully utilize the advantages of ABL in the classroom, so that the students can enjoy the benefits of an engaging and efficient learning process.

Recommendations

According to the results of the current research, the following recommendations can be proposed to enhance the implementation and efficacy of activity-based learning (ABL) in elementary school:

- Teachers should be provided with adequate training and professional development to enhance their ability to integrate activity-based learning into various subjects effectively. This training will equip them with the necessary skills and strategies to manage classroom dynamics and ensure successful implementation.

- Schools need to invest in resources and materials to facilitate activity-based learning, providing students with access to tools needed to implement hands-on projects and experiments. This involves physical aids and technological equipment that can support interactive activities.
- To overcome the time constraints of a packed curriculum, schools could consider revising lesson plans to incorporate ABL more efficiently. This may include reduced yet more intentional activity sessions that do not overload the schedule and are in line with academic goals.
- Teachers are encouraged to use diverse activities that accommodate various learning styles to be able to engage all students. Teachers can develop more profound insights and critical thinking by employing various techniques, including group work, role-playing, and real-world simulations.
- Schools' ought to develop a versatile classroom setting that takes into account interactive and group work. Student participation and engagement can be improved by changing the classroom configuration to give the students more room to work together.
- Parents and caregivers should be involved in the significance of activity-based learning, which may serve as a solution to the resistance to the approach. To support them, giving them some clear examples of how ABL helps students develop academically can be helpful.
- Schools should formulate measures that will tackle the issue of variation of students in their participation. This may involve giving roles that will suit the varied degrees of comfort with active engagement so that every student is engaged and will gain out of the activities.

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