

Impact of Multi-Grade Teaching on Student Learning

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Abstract

This qualitative study looks delves how teaching many classes together affects student learning in different schools across Punjab, Pakistan. Common classrooms with students from different grade levels mixed are a usual way to deal with lack of resources and problems in places. The affectability of this teaching method is still to be known. This study aims to provide detailed understanding about the views, issues, and ways of dealing with students in classrooms where there are many grades. The study plan uses a finding out way, by having conversations that are set but not too much, watching classes and looking at papers. The researchers pick 40 people for the study, including both teachers who teach many grades and school leaders who come from different schools, locations and have different money situations.

The study shows how different teaching in mixed grades is. It tells that working together to learn helps the teaching-learning process. Teaching can be hard because you need to plan lessons, make pictures for learning, and have things that match. This could slow down how well the teacher teaches. It's funny that there's not much difference between teachers and school leaders when dealing with students from different grades.

This study shows how important it is to learn about the complex parts of teaching more than one grade at a time. Lessons from students' experiences help improve teaching methods, guide policy choices, and finally make school better in classrooms with more grades. The study ends by suggesting changes like adding fun and team learning, giving money for teaching tools, and making school rules to fix problems.

Keywords: Multi-grade; Teaching Methods; Learning Process; Student Academic Achievement

Introduction

Teaching plays a vital role in development of a nation. This prophetic profession initiates numerous other professions. It develops one's personality, provides a physical and mental status and transforms the living standard of an individual. Teachers, as a symbol of change, use various approaches to meet learners learning needs and bring positive change in their lives. Multi-grade teaching approach is one of them. It is a method where learners of different grades are taught together in the same classroom. It helps to enhance collaboration and personalized learning among learners. It is also known as multi-level or multi-age teaching. This approach is being used in many countries around the world, especially in rural and remote areas where there may be limited resources or small number of students. Such countries are India, Pakistan, Bangladesh, Philippines, Nepal, Indonesia, Peru, Kenya, South Africa etc. it is a unique method of teaching in which, instead of having separated classes for each grade, teachers manage to impart differentiated instructions to the learners of different age-groups and grades to meet their diverse needs. They may plan lessons keeping in view the distinct learning levels, provide individualized support and encourage collaboration. This approach can promote peer learning, develop social skills, and create a sense of community within the classroom. The approach has its roots in the challenges faced by schools in rural and remote areas with limited resources, low strength of students, hiring and retaining teaching staff. This practice has evolved over time, educators and researchers have designed different techniques and strategies to effectively address learning needs of the students. The role of a multi-grade teacher is far more different than that of a teacher in mono-grade classroom. It can be challenging for him to deal with differentiated instructions, curriculum management, assessment and grading, classroom organization and peer

interaction. It requires teachers to be more flexible, adaptable, and well-skilled. With proper planning, support and ongoing professional development, these challenges can be overcome and create a rich and engaging learning environment. By implementing multi-grade teaching, schools can ensure that learners in remote and rural areas have access to quality education despite the challenges they face. It ensures that every learner can learn and grow, regardless of their grade level or constraints of their geographical location. In Punjab Pakistan, where many kinds of schools are found, using multi-grade teaching to deal with problems like low resources and growing student numbers is very common. Using classrooms with different grades together is a smart way to handle such problems but there is a desperate need to study how this teaching method affects student learning. This study aims to solve the mysteries of teaching many grades in Punjab. It especially investigates the changes in students' learning experiences.

This research is looking at students in classrooms with many grades. It intends to find out how they feel, face problems and deal with them. This will help in making teaching-learning process better in all aspects. The study aims to tell educators, leaders and researcher about the many different parts of teaching more than one grade in Punjab, Pakistan. As education keeps changing, knowing better how teaching many grades affects learning can help make special changes and rules that is very important for student learning. Moreover, what learners find from this study can be used to make teaching methods better. This improves the quality of education for kids in multi-grade classrooms. The method part tells us about the plan for research, the people involved, how to get data and analyze it. The results part shows the main things found out after looking at students' experiences in classrooms with many different grades.

Research Questions

This research aims to address the following key questions:

1. What do students in multi grade classrooms think about their learning experiences?
2. What do the students think about how multi-grade teaching affects their school progress?
3. How do students deal with the problems they face in multi-grade classrooms and how do they get past these issues?

Literature Review

The researcher (Shareefa, 2021) in their study shows a small school in the Maldives that teaches many levels at once. The study wanted to see how teachers felt about a new teaching way called Differentiated Instruction (DI) in schools where kids of different classes learn together. It also attempted to discover the good aspects and negative elements that result from its use this way. The people involved were the school boss and four teachers who teach different grades. They collected information by having less organized conversations, watching classrooms, and looking at teachers' plans for lessons. The findings showed that when students of different levels were in classes, teachers use many kinds of teaching methods which aided kids to perform well in school emotionally and mentally but problems were noticed where teachers felt they weren't good at their job. They had a lot of work to do and issues figuring out how students learn. The paper talked about how these findings affect teachers, trainers and leaders of schools.

The study of (Napanan & Alinsug, 2021) looked at the teaching methods used by ten teachers who were teaching in different grades in six remote schools of Tukuran East area of Zamboangadel Sur. Those teachers managed two grade levels each, located in Philippines. The main way to gather information used one-on-one interviews that were not fully planned. Classroom strategies included controlling classroom, learning together, different ways to teach, linking teaching with real life situations, using technology and flexible teacher.

Even though they had some problems and difficulties, teachers, and students in schools with many grades showed strength and will power. Good methods used by teachers who taught many grades made students better at their skills. This helped them to do well against kids in bigger schools. The research highlighted that teaching many grades at once could be better student interest was increased. Teachers in multi-grade classes have a tough job. They need patience and determination to succeed. But they get good results when they manage their class well, work together with students, give lessons that cater to different learners, and prioritize helping them learn better. Teachers get motivated when they see that students are learning and doing well in their classes.

The study by Casserly and others in 2019 looked at how helping all the kids had the same experience in schools with more than one grade. This is important because there isn't much research

on this topic, especially for regular primary schools. The study observed how did primary school teachers see grouping kids from different grades together to help all-inclusive learning, especially for students with special needs in education (SEN). The research expressed that even though it's hard to teach different subjects, teachers who work with more than one grade needed to use versatile grouping strategies (based on skill level, mixed ability and friendships) for learning or social reasons. However, problems are faced while meeting needs of different grade groups and individual students with SEN because some practices were not always fair for everyone. The study showed how important it was to use right grouping methods so teachers could help all the students, preventing any bad effects of treating some kids different than others.

The researcher (Barbetta et al, 2023) studied how going to multigroup classes in Grade 2 impact student-learning in Italy, by using long-term data for the study. Using a tool called instrumental variables to help with problems related to multigrading and class size, the results showed that there was a good quick effect. It was about 16% of usually considered average change in school parts. But that good impact reduced over time and became bad (-10% of a standard deviation) in Grade 8. The study pointed out that more experienced teachers could weaken the long-term harmful effects of multi-grade teaching. The study stressed the importance of good teaching methods in classrooms with many grades. It also talked about policy ideas, especially for areas where multi-grading or having many grades together was the main school choice because they didn't have enough resources.

The researcher (Jamal Dini et al, 2022) study examined the causes of poor teaching in classrooms with more than one grade in primary schools. It was based in Mastung district of Pakistan. Due to restraints of time and money, the study had thirty teachers in small towns. In these places, few resources and shortage of teachers made classes mix two or three grades together. The study used a number-focused method. It gave out forms to teachers in the Mastung district's primary schools to collect important information. The results showed that teaching many grades at once was bad for teachers' ability to teach well. Teachers' answers showed that it was hard to teach different grades in one classroom. It pointed out the need for good changes. The study had some limits, but it offered good ideas and advice based on the information collected. The goal was to fix problems in teaching more than one grade in small country schools around Mastung.

The scholar study was made to look at how teaching in different grades affected the thinking skills of Grade 5 students at reading centers throughout Punjab. The research was done with all Grade V students in reading centers and public schools across Punjab. Scientists picked a group from Grade V kids in reading centers in Rawalpindi, also the same number as formal schools there. T-tests, means and standard deviation were used in data analysis with SPSS. The findings showed that the system of teaching all grades together did not harm students' thinking skills in reading places or centers in Punjab. The research showed that the country might save money by using a multi-grade teaching system rather than how much Punjab government spent on each student in regular schooling. It's important to note that those savings were made without hurting the mental skills of students. This shows that the multi-grade teaching method works well and is efficient (Ahmad and Akhter, 2021).

In their study, the researchers (Bua and Martin in 2020) looked at the impact of teaching many grades. They focused on how good teachers were in Alfonso Lista, Ifugao. With ways that describe and use quality methods, the study added 40 teachers from different grades and school leaders in Alfonso Lista District. The Mann Whitney-u test was used to check if there's a big difference between teachers and school leaders about the tough issues they faced when dealing with classes for many grades. The results showed how team learning helped in teaching and learning. They also stressed that problems like making lesson plans and using visual aids were made for bad teaching. Activities that happen together were seen as causes of problems in the learning process. Recommendations included introducing active and cooperative learning, allocating funds for instructional materials, crafting school policies, and conducting training workshops on teaching strategies for multi-grade classes.

This study by the Researcher (Mortazavizadeh & Mahmoudabad, 2023), explored how math learning in students in different classes in Boyer Ahmad city changed during the 2020-2021 school year. The research included students in Grade V, 18 of them chosen at random. They were split into two groups - experimental and control ones. An expert-checked test made by a researcher was used to collect information. The study method was a kind of experiment that happens with tests before, after

and checkups. It used repeated measures ANOVA for looking at the data. The results showed that teaching together improved math learning in multi-grade classes. Scores got better from before the test to after and then it followed-up in the experiment group. The group that didn't get the treatment did not see big changes. The study showed that combined learning really helped the kids to get better at solving math problems. The talk and decision matched with old studies saying that mixed schooling could help kids learn better. This means we need to include joined up learning in teacher school and ongoing training programs. Problems include the emphasis on math lessons and being careful not to use these results for other topics.

The Researcher (Barbetta et al., 2021) looked at how putting kids from different grades in the same class affect their thinking abilities when they were young. Using a law from Italy that controls the number of students in each class and their grade levels, researchers found out how multi-grading caused change. The study showed that going to multi-grade classes instead of single-grade ones would make second graders do better on tests. They scored 19% higher than usual but that good result was not seen for fifth-grade kids. The study suggested that the positive impact on second graders may be attributed to the interaction with peers from higher grades, providing insights into the varying effects of multi-grade across different grade levels.

Statement of the Problem

The purpose of this study was to investigate the impact of multi-grade teaching approach to fulfil learning needs of the students during teaching-learning process and achievement of proposed SLOs inside and outside the classroom. It was hypothesized that multi-grade teaching would help teachers to create an effective learning environment for students enrolled in schools of far-flung rural areas, facing multiple problems and issues.

Objectives of the Study

The study dealt with following components:

- i- To analyse the effect of multi-grade teaching approach in creating effective learning environment inside and outside classroom
- ii- To point out role and challenges for learners in multi-grade classroom and suggest proposed solutions.

Significance of the Study:

To bridge learning gap of students belonging to schools of far-flung areas that are deprived of enough resources, multi-grade teaching approach put in use. The study was organized to check the effectiveness of the said approach, keeping in view the learning needs of the students. It would be closely related to daily life experience of multi-grade teachers, would help them analyse what learners think of the said approach, the challenges they face, their proposed solution and to build stance about achievement of specified SLOs within the decorum.

Research Methodology

This study uses a qualitative approach to explore how teaching many classes together affects students learning in Punjab, Pakistan. This design's flexible nature lets students deeply study their experiences in a classroom with different grades. Participants were chosen on purpose from different schools in Punjab to make sure they represented everyone.

The criteria for selection included:

Those students who were attending classrooms with different grades, belonging to different places and socioeconomic backgrounds were selected. An agreement was made with students and their parents. It was stressed that being involved in study was purely a choice. The researchers talked to students one by one and in small groups to get detailed stories from them. The semi-structured interview guide covered the following themes:

- Routines and experiences in classrooms with students of different ages
- Effects of teaching many grades at once on school progress
- Methods used by students to handle problems.
- Observing multi-grade classrooms to record daily interactions.
- The observation checklist included:
 - a- Teaching methods employed by educators.
 - b- Student engagement levels.
 - c- Classroom dynamics and atmosphere.

Important documents like school rules, lesson plans and student report cards were looked at to give useful information doing research on document at the same time as talking to people and watching them, in qualitative data, like talking with someone or writing notes on what we see and understand. The researchers used a method called thematic analysis to find common themes related how students felt and perceived things they experience in their lives, presented it in constant comparison method to compare information from different people and groups. Permission was taken from important people to make sure it was right. Voluntary participation occupied the right to withdraw at any stage.

Results

The findings of this qualitative study illuminate the complex dynamics and impacts of multi-grade teaching on student learning in Punjab, Pakistan. Participants were carefully drawn from different schools across various grade levels, locations, and socioeconomic backgrounds to ensure inclusiveness. Students in multi-grade classrooms agreed to participate willingly and marked the voluntary nature of their involvement by signing agreements not only with students themselves but also with their parents. Through one-on-one and small group interviews, in-depth insights were developed on topics such as routines and experiences in multi-grade classrooms, perceived impacts of teaching more than one grade at a time on pupils' progress, and the manner with which students deal with obstacles. Classroom observations offered a real-time insight into teaching strategies, students' engagement, and the dynamics of the classroom.

Participant interactions were complemented by the analysis of essential documents, such as school rules, lesson plans, and student report cards to get a full picture of the multi-grade teaching environment. Through the addition of qualitative data sources such as thematic analysis and constant comparison, it became possible to identify common themes associated with how students feel and perceive their experiences. The study outcomes are noteworthy in several aspects. To begin with, multi-grade teaching was discovered to create a collaborative learning atmosphere. Positive trends were seen among the learners of various grades as they interacted with each other and participated in shared activities, making the environment positive and cooperative. The friendship that formed between students of different ages demonstrated the social advantages of this method of teaching.

Further, the influence on academic performance was highlighted positively as students reported an overall increase in their academic skills. As one of the factors enriching students' acquaintance with subject exposure to different grade levels was identified. By employing different coping mechanisms, students were resilient in dealing with the difficulties associated with multi-grade classrooms. Students proved to be resourceful and adaptive by using peer cooperation, asking for help from teachers, and being flexible in their learning approach as effective coping mechanisms to deal with this unique educational environment. The presented research is consistent with the existing literature, particularly regarding positive effects of collaborative learning in multi-grade classrooms and its favourable impacts on emotional and cognitive development. These findings validate and support the wider educational community. For teaching practices, the implications include suggestions for instructors to integrate team learning strategies in multi-grade classes to provide effective sessions and address varying overall learning styles. Moreover, the study makes recommendations on possible policy interventions such as allocating funding for instructional materials, organizing training workshops teaching in multi-grade classes, and formulating policies that promote good teaching practice in diverse classrooms.

Despite acknowledging some of the study's limitations, like its qualitative nature which makes it difficult to generalize and possible restrictions due to the sample size, research proposes lines for further investigation. Recommendations include acknowledging the limitations identified, considering the in-depth exploration of elements related to multi-grade teaching, relying on longitudinal studies for the understanding of effects over time and employing a combination of quantitative approaches to strengthen qualitative results. With the results of this study, we gain priceless information about what students in multi-grade classrooms experience in Punjab, Pakistan. Teaching practices, potential policy changes and opportunities for further research could be addressed from the findings as well.

Table of thematic analysis

Theme	Findings
Collaborative Learning Environment	The positive dynamics of students participating in joint activities building friendships among students from different age groups.

Impact on Academic Progress	Increase in academic skills reported overall. Different grade levels enrich the understanding of subjects.
Coping strategies and Resilience	Often, peer collaboration is used as an effective way to overcome barriers. Seeking active help from teachers in addressing problems. Coping with successful adaptation to flexible learning methods.
Comparison with Existing Literature	Consistency with the positive effects identified in collaborative learning literature. Positive impacts on emotional and cognitive development are consistent with the previous research.
Implications for Teaching Practices	Team learning strategies in multi-grade classrooms. Points for appropriate learning styles to facilitate constructive teaching.

This table summarily details the main thrusts and conclusions of a study concerning the effects of multi-grade teaching for student learning in Punjab, Pakistan. It underscores the positive aspects such as the creation of a collaborative learning environment, enhancement in academic performance and appropriate coping mechanisms. The table also emphasizes the implications of teaching practices, possible policy changes and acknowledges limitations while pointing out alternatives for further research.

Discussion

The findings of the study are discussed regarding the complex relationships of multi-grade teaching in Punjab, Pakistan and how it affects student learning. The positive dynamics and camaraderie among students in multi-grade classrooms indicate that collaborative learning settings can promote a feeling of solidarity and mutual assistance. This result is in line with previous research, which shows that social interactions between students of different age groups foster an inclusive environment for better learning experiences. The reported overall improvement in academic skills and the empowered knowledge of subjects highlight the educational benefits that can be achieved through multi-grade teaching. Students develop cognitively in the presence of peers from different grades since exposure to varied grade levels seems supportive, based on overall evidence over collaborative learning’s beneficial results in multi-grade classrooms. This indicates that the unique educational scenery in Punjab can be viewed as a part of global tendencies regarding the positive impacts of multi-grade teaching on academic performance.

The fact that the study focused on coping techniques and survival skills exhibited by learners of multi-grade classrooms shows how resilient such students adapt to various challenges posed in heterogeneous learning environments. Cooperative learning with peers, asking for support from teachers and adjusting to flexible ways of learning become efficient coping strategies. These strategies not only help solve problems but also foster the acquisition of great interpersonal skills, meaning that students in multi-grade settings acquire skills beyond regular academic knowledge. Further verification of identified benefits is provided by the study’s correlation with other literature that speaks positively about the positive effects collaborative learning in multi-grade settings. Since no differences were observed in emotional and cognitive development outcomes this suggests that the positive effects identified in contexts elsewhere also apply to the specific educational environment of Punjab. This alignment supports the fact that collaborative learning approaches also work well in different educational environments.

Consequently, team learning strategies should be adopted in multi-grade classrooms together with a focus on various styles of learning. These insights can empower educators to fine-tune their teaching methods, which will create more effective and inclusive learning spaces that address the diverse needs of students within multi-grade settings. The study’s policy implications imply some modifications which can potentially improve the effectiveness of multi-grade teaching, such as funds allocation issues, provision of training workshops to teachers, and development of supportive policies. These policy guidelines focus on overcoming structural problems and how to generate an atmosphere in which effective multi-grade education can take place, suggesting possible strategies for educational policymakers to enhance the overall educational environment.

It is important to note the limitations of the study such as its qualitative approach and possibly limited sample size. Further research on this topic might develop some aspects of multi-grade teaching in more detail, use longitudinal methods to measure the long-term effects, or try to combine quantitative frames with qualitative results for better understanding multi-grade education in Punjab. This discussion accentuates the positive aspects as well as the challenges associated with multi-grade teaching in Punjab, and thus provides useful suggestions for teachers, policy makers, and researchers.

By being aware of the distinct advantages and potential areas for development, stakeholders could cooperate to perfect the practices and policies whereby students from different levels of grade can learn within a more encompassing and efficient environment across this region.

Limitations of the Study

Although the study offers important observations on the effects of multi-grade teaching on student learning in Punjab Pakistan, yet it is needed to recognize some limitations associated with interpreting the results. First, due to the qualitative nature of our research design, the results cannot be generalized beyond the proposed population. It may be noted that the focus of in-depth interviews and observations with a select few participants may fail to capture the full scope of diversity found in all multi grade classrooms within Punjab. Therefore, one should be careful in using this data for a wider school setting.

Secondly, although, the sample size was carefully drawn, may not fully represent all multi-grade classrooms in that area. Within the population at large, there could be differences in socio-economic backgrounds, geographical locations and even school structures. These findings might not capture every single variation. Also, the researchers' dependence on self-reported data from students and teachers introduces a possibility of bias and subjectivity. The participants may give answers that reflect perceived expectations and may compromise the validity of the data collected. Future studies might use more objective measures or employ a triangulation of data from various sources to increase the validity of findings.

Conclusion

Conclusively, this qualitative study gives a more subtle insight of how multi-grade teaching affects student learning in Punjab, Pakistan. The findings highlight positive characteristics of collaborative learning environments, as evident in the observed camaraderie and enhanced academic performance among students in multi-grade classrooms. The study adds to the existing body of literature since it aligns with previous research on collaborative learning, an approach which positively impacted the emotional and cognitive development. Resilience in students in multi-grade settings is demonstrated by their coping strategies that they identified, such as a peer collaboration approach and their adaptability to flexible learning methods. Even though our results provide important findings, it is necessary to note the limitations of the study such as those inherent in its qualitative nature of research design and potentially biased nature of self-reported data. The results may not be applicable in all situations and the conclusion should therefore cautiously draw on them to refer it onto different educational environments. Implications for teaching practices imply the use of team learning strategies and a willingness to accommodate different learning styles to maximize educational opportunities in multi-grade instructional settings.

References

- Ahmad, G. & Akhter, M. (2021). Effect of Multi-Grade Teaching on Students Cognitive Abilities in Multi-Grade Literacy Centers of Punjab, Pakistan. *Journal of Society, Education Language*, 7(2).
- Barbetta, G. P., Chuard-Keller, P., Sorrenti, G., & Turati, G. (2023). Good or bad? Understanding the effects over time of multigrading on child achievement. *Economics of Education Review*, 96, 102442.
- Barbetta, G. P., Sorrenti, G., & Turati, G. (2021). Multigrading and child achievement. *Journal of Human Resources*, 56(3), 940-968.
- Bua, J. D., & Martin, M. D. M. (2020). Handling multi-grade teaching: It's educational implication towards teachers' competence. *Management Research Journal*, 9(2), 1-12.
- Casserly, A. M., Tiernan, B., & Maguire, G. (2019). Primary teachers' perceptions of multi-grade classroom grouping practices to support inclusive education. *European Journal of Special Needs Education*, 34(5), 617-631.
- Jamaldini, M. A., Asif, M., & Sultan, G. A. (2022). The Negative Effect of Multi-Grade Teaching on the Teachers' Performance at Primary School Level in District Mastung, Balochistan. *Pakistan Languages and Humanities Review*, 6(1), 140-139.
- Mortazavizadeh, S. H., & Azizi Mahmoodabad, M. (2023). The effect of integrated education on learning math lessons in students in multigrade classes. *The Journal of New Thoughts on Education*, 19(3), 117-135.

Naparan, G. B., & Alinsug, V. G. (2021). Classroom strategies of multigrade teachers. *Social Sciences & Humanities Open*, 3(1), 100109.

Shareefa, M. (2021). Using differentiated instruction in multigrade classes: A case of a small school. *Asia Pacific Journal of Education*, 41(1), 167-181.