MULTIGRADE TEACHING, A REMEDIAL STEP FOR SLOW LEARNERS IN AN INCLUSIVE SETUP

Tasneem Saifuddin[*1], Dr. Waqas Bin Dilshad[2], Sonia Ishrat[3], Kanwal Shahzadi[4], Muhammad Altamash[5]

[*1]Lecturer (NUML University);
[2]Assistant Professor (Benazir Bhutto Shaheed University Lyari Karachi);
[3,4,5]Research Scholar (NUML University)

[*1]tasneem@numl.edu.pk; [2]link2waqas@gmail.com; [3]soniaishrat943@gmail.com;
[4]kanwal7779@gmail.com; [5]altamash021@gmail.com

Corresponding Author: *

ABSTRACT

In inclusive educational settings, the diverse learning needs of students often pose significant challenges, particularly for slow learners who may struggle to keep pace with their peers. This study explores the potential of multigrade teaching as an effective remedial strategy to support slow learners within an inclusive classroom environment. Multigrade teaching, where students of different ages and grade levels are taught together, offers a flexible and differentiated approach that can be tailored to meet the individual learning needs of students. Through action research, the study examines the effects of multigrade teaching on the academic performance, and social and emotional development of slow learners. Data is collected through student`s grade cards and through observation which was analyzed through SPSS conducting t- test and qualitative insights were gathered from classroom observations. The findings suggest that multigrade teaching not only fosters a supportive and collaborative learning environment but also allows for personalized instruction that benefits slow learners. The study concludes that multigrade teaching can be an effective remedial strategy, promoting the academic success and inclusion of slow learners in mainstream classrooms. Implications for educators and policymakers are discussed, with recommendations for the integration of multigrade practices in inclusive education frameworks.
Key words: Multigrade teaching, Inclusive education, Slow learners, Action research

1. INTRODUCTION

Learning is about making a shift, from one's perspective, in a new ability, or in understanding a scientific law (Cherry, 2022). This is not an age-related or coincidental difference. Learning is typically a purposeful process that produces a permanent change. Whether we attend classes, read discussion papers, or search for books, our objective is to learn. The pace of learning is different for different children, which needs to be understood by the teachers. Teaching is an external sequence of activities intended to assist the learner's internal learning process. Instruction and teaching are external to the student. For learners, learning is innate (Spelke & Kinzler, 2009). If you

are not driven yourself, you cannot inspire others. Behaviors are observed, but motives are not. Is education a behavior or a motivation? Learning is motivation and a behavior, but only behavior is visible; performance is external, while learning is internal (Tenenbaum et al., 2006). In general, the teacher's role can be divided into the following categories (Bromley, 2023):

- Traditional Role: Teacher-Centered
- The contemporary role of a student-centered facilitator.

Different models of teaching have been developed, out of which one effective is multigrade teaching, which is teaching of various grades together.

Studies suggest that multigrade teaching proved to be very effective in learning with different needs of students (Mulryan-Kyne, 2007 and Brown, 2010). In the context of Pakistan, limited facilities are applied for the students to learn, in this context slow learners are badly affected, and the consequences urged them to drop out (Soofi and Akhtar 2015).

The present study is aimed to find out the effects of multigrade teaching on slow learners that can facilitate learners as well as the administration of schools who because of limited budget could not afford to hire special educators to meet the needs of those learners.

Research Objectives:

As discussed, education is the pillar of the nation, therefore it is the responsibility of the nation and every individual to work in order to promote and facilitate education, thus finding out the ways to facilitate all type of learners. The objective thus based for the study are:

- To assess the efficacy of using multigrade teaching in and inclusive classroom
- To examine the effects of multigrade teaching on social and emotional development of slow learners.

The study is planned based on the above objectives to find out the overall effectiveness of multigrade teaching.

Research Questions:

The study is framed under the following research questions to bring about the effects of multiple-grade teaching as a way to address the needs of slow learners. Research questions constructed are as follows:

Q.1 How does multigrade teaching effects students' academic performance?

Q.2 What strategies educators can use effectively to implement multigrade teaching in and inclusive classroom?

Q.3 What social and emotional effects does multigrade teaching have on students learning and development?

The research questions above directed to analyze the impacts and efficacy of multigrade teaching in an inclusive setup in context of Pakistan.

Research was conducted in a private medium class school at Central Zone of Karachi, Pakistan. where there is an inclusive set up. Slow learners are seated with normal students. Action Research was carried out as the purpose of the study is to bring a change and to improve the ongoing pedagogy that can help the slow learners. Two multigrade classes were structured for Grades 4-7. Researcher planned and developed strategies and engaged for a period of 4 months with the school to observe the efficacy of multigrade teaching in the school.

Overall, the study highlights the positive impact of multigrade teaching on slow learners within an inclusive classroom setting. By examining students' performance in core subjects and the social and emotional development of learners, the research demonstrates that multigrade teaching can effectively address divers' educational needs. The findings indicate that this approach not only enhances academic performance but also fosters a supportive learning environment. Given the budgetary constraints in many Pakistani schools, multigrade teaching presents a practical solution to improve education quality and inclusivity. The study's insights for educators' recommendations for aiming to implement effective multigrade teaching strategies.

2.Literature Review

"As educators, we often assume that teaching is just about us and our roles, but in reality, students and their learning are the most significant components of the educational process." This makes us think about what it means to "learn." (Cherry 2022). There are a lot of variations in theories and definitions in educational literature, particularly in educational psychology. Effective teaching techniques are critical for improving student learning outcomes, as educational research has repeatedly shown. Constructivist methods, emphasizing active learning and student-centered instruction, have demonstrated enhancement of critical thinking and problem-solving abilities (Bransford, Brown, & Cocking, 2000). To address the various learning styles and abilities of students, differentiated instruction—which customizes teaching strategies to meet the needs of each individual student—is also essential (Tomlinson, 2001). Deeper comprehension of the material is made easier, and student engagement is increased when technology is incorporated into the classroom through the use of digital tools and resources (Mishra & Koehler, 2006). Additionally,

by offering insightful feedback, formative assessment techniques help teachers and students track development and modify their learning approaches as necessary (Black & Wiliam, 1998). The combination of these pedagogical approaches highlights how effective teaching and learning processes in modern education are dynamic and multidimensional.

Learning in the 21st century.

The idea of "twentieth-century learning," which has been defined and characterized in a variety of ways by a number of powerful organizations, is central to many of the practices and policies that shape K–12 education at the local, state, and federal levels. The competencies required to succeed in today's intricately linked global environment are commonly referred to as 21st century learning. Digital literacy, cultural competence, inventiveness, emotional awareness, entrepreneurship, critical thinking, and problem solving are a few examples of these abilities (Dakhi et al., 2020, Frydenberg & Andone, 2011 and Bernhardt ,2015). According to Howard Gardner's 2007 argument, the millennium has brought about a period of unprecedented speed and change brought about by advances in science, technology, and globalization. This has had a profound impact on how we interact with one another, obtain, and share information, and process knowledge. There is a sense that there is a disconnect between the past and the rapidly emerging future in the various narratives that situate the 21st century learning movement. As a result, innovative and different teaching practices that not only support workforce preparation but also highly collaborative project-based learning environments are needed to meet the demands of the modern educational system. In light of this reasoning, one could contend that today's students—often referred to as "digital natives"—need interactive educational experiences that help them become problem solvers, situational adapters, and creators of opportunities through the use of technology and networking opportunities with like-minded people (Qian and Clark, 2016).

The world in which we live is changing quickly; borders are still erasing, political and military disputes are turning into international conflicts, and domestic economies are always under pressure from the ebb and flow of global markets and events. A society that is mobile and full of channels for the distribution of change occurring anywhere, according to John Dewey's 1916 book Democracy and Education, "must see to it that its members are educated to personal initiative and adaptability" (p. 88).

Multigrade Teaching.

When a single class comprises two or more student grade levels, multigrade teaching takes place within a graded educational system (Mulryan-Kyne, 2007). It stands in contrast to the typical classroom arrangement in graded systems, which has students in a single classroom who are all in the same grade. "A "grade level corresponds to a specific age group of students in many graded systems because age and grade are congruent (Little, 2001). This might not apply to systems that frequently use grade level acceleration and repetition, though. In both developed and developing nations, multigrade teaching may take place for three main reasons (Berry,2000).

Initially, small schools in isolated and sparsely populated areas are frequently linked to multigrading. While providing a full primary education cycle, these schools may only have one, two, or three teachers (Naparan, & Alinsug, 2021). Each of these teachers will be responsible for teaching classes that span multiple grades if that cycle has eight grade levels. These so-called "small" schools are also occasionally called "multigrade" schools. The possibility of multigrade schools raising primary school enrollment rates has drawn attention in the context of developing nations. They encourage more kids, particularly girls, to attend school by bringing the school closer to the community. Large urban and suburban schools frequently employ multigrade teaching (Hargreaves 2001). It is a reaction to differences in student enrollment in various nations. To adjust for class sizes, a school with a two and a half-grade entry, for instance, might need to combine two grade levels. In nations where there is a high rate of teacher absenteeism without a "cover," grades may also be combined to prevent teacher absences from occurring in class (Little, 2001). Then, a single teacher must teach two grade-level groups. Although there is not much literature on the latter issue, it is most likely a common occurrence in nations in both Africa and the Caribbean. Multigrade instruction might be an intentional reaction to issues in the classroom. This has to do

with the multiage perspective in developed countries (Khazaei et al.,2016). The case for mixed age grouping in the classroom is made by proponents who claim that there are good educational grounds for doing so. It has been said that mixed-age classrooms foster better classroom cooperation and help kids develop their social skills. The literature on developing nations rarely addresses these points, though some analysts believe that multigrade organized classes could be an affordable way to deliver high-quality education in hard-to-reach places. (Naparan, & Alinsug, 2021)

Due to their small size, multigrade schools can be an affordable means of bringing education closer to the community (Thomas and Shaw, 1992). They also make it possible for the community to receive the entire primary school cycle. Multigrade schools are being used in Vietnam, for instance, to reach communities in the country's mountainous regions, many of which had no prior access to education (UNICEF, 1994; 1998). Multigrade schools in Zambia are thought to be a means of improving the current primary schools in isolated areas that previously only provided an incomplete or partial primary education (Little, 1995).

Mainstream Teaching.
Learning to "fit into" a specific type of system or integrate into an already-existing system is the goal of mainstreaming (Farrell et al., 2010). Giving certain students additional support to help them "fit in" or become a part of the regular classroom routine is known as mainstreaming. Assessors diagnose and recommend technical interventions (like enrolling students in special programs) based on their assessment results. Changes that must occur in learners for them to "fit in." are the main focus of mainstreaming and integration. Learning is the priority here. (Kamla-Raj 2014) Therefore, it goes against the concept of full inclusion to just throw students into a mainstream classroom without taking the necessary steps to meet their needs. Regarding this Ainscow and Farrell (2002) the growing diversity of students without disabilities in terms of academic background, level of mastery skills, and interests appears to worry mainstream educators. More significantly, they primarily believe they lack the tools and resources necessary to complete this work well. When students with disabilities are included in regular classes, the already challenging nature of teaching becomes even more apparent (McLeskey & Waldron, 2002). For example, Baker and Zigmond (1990) discovered that the teachers in the mainstream primary schools they examined typically taught in large (Youngs, & Youngs 2001), single classes and infrequently differentiated their instruction or adjusted meet the needs of their students. Furthermore, according to a survey on adaptive instruction. (Ysseldyke, et al., 1990),

Inclusive Education.
The latter perspective defines inclusion as treating students as complete classmates, regardless of their differences. (Ainscow, 2013). The definition of inclusive education, as given by Dyson and Milward (2000: 64), is similar. Non-discriminatory education that considers a student's disability, culture, gender, or any other feature that the community deems important is known as inclusive education. In a community where there are no exceptions, all students have equal access to the culturally valued curriculum of their society as full-time valued members of age-appropriate mainstream classrooms, regardless of their intellectual, physical, sensory, or other differences (Lindsay ,2003). Rather than prioritizing assimilation, inclusion aims to prevent the dominant modes of thought and action from colonizing the experiences of minorities. Literature suggests that inclusive education entails recognizing that every child and youth can learn and requires assistance (Messiou, 2007). Enabling education structures, systems, and learning methodologies to meet the needs of all learners; acknowledging and respecting the fact that all learners are unique in some way and have various learning needs, which are equally valued as an ordinary part of the human experience (Graham, 2020).

Two or more grades are changed in a single classroom in Pakistan, according to Nawab and Baig (2011). And a single teacher instructs one grade before moving on to the next and involving the previous group in an activity before instructing the latter. Though it cannot be compared to the multi-grade setting where teachers incorporate related and similar concepts or themes throughout the curriculum of different grades, this is still a type of multi-grade setting.

The absence of teachers, insufficient funding, the cost of building school buildings, and the length of time needed to complete these structures are other significant issues in Pakistani education. According to Mansoor (2011), multi-grade teaching is popular, but not in the truest sense of the word. She goes on to say that multi-grade teaching receives little to no attention. It happens when the number of students and the appointed teachers are uncoordinated. Multigrade teaching occurs when a school has only one teacher assigned to it. Multi-grade teaching results from a lack of infrastructure and the transfer of teachers to isolated areas, where they lack political support and do not exercise leadership. However, Pakistan does not formally recognize multi-grade schools. Although the country has accepted it as a de facto solution to the system's incapacity to meet the demands of education, it is not regarded as an effective approach. Considering UNESCO's 2003 reports, Pakistan lacks both specialized professional preparation and the concept of multi-grade teaching. In remote areas, teachers are typically hired based on their primary school certificate (PTC). They receive training in multi-grade teaching through experimentation and experience with various teaching methods and strategies.

Multi-grade teaching occurs because, according to Mansoor (2011), 65% of Pakistan's primary schools in the Sindh province only have two rooms available for each of the five grades. In the northern region of Pakistan and in Chitral, over 80% of primary schools are multi-grade, with two or three teachers responsible for teaching students in prep school through grade five. Multi-grade teaching is a common practice in primary schools across Africa, as demonstrated by the facts mentioned above (Juvane, 2005). However, it is regrettable that there is a lack of systematic evaluation and publication of data on this phenomenon worldwide.

Learning theories must be understood because teaching and learning are centered on the outcomes for students. Encouraging digital rights and privacy and ethical concerns are vital to the global dissemination of information. Digital literacy, adaptability, and critical thinking are given top priority in 21st-century education. In both developed and developing countries, multigrade teaching is a method of promoting education in remote areas by teaching multiple grade levels in a single class. While inclusive education treats all students as equal members of the classroom, mainstream teaching integrates students into regular classrooms. Though it is not formally recognized or subject to a systematic evaluation, multigrade teaching occurs in Pakistan because of resource constraints.

3.Methodology

For the current study, Action Research is utilized as the purpose is to find out the efficacy of multigrade teaching and to improve the learning in an inclusive set up. Action Research as defined by Rapoport's (1970: 499)

 "Action research seeks to advance social science objectives through cooperative efforts within a mutually agreeable ethical framework while also addressing the practical concerns of individuals in a crisis."

Foster (1972) elaborates the process of altering the problem situation itself to pursue the goals of action research which was as stated in the Rapoport definition. It works through collaboration which could be in an organization, a community, a network of organizations, or one of the in-person groups (Altricher et al., 2002). It is executed in cyclical phases: (Drummond, & Themessl-Huber,2007).

Reflection is the critical stage which allows the researcher to plan for the nest cycle. The number of phases that are completed in cooperation between action researchers may vary across different action research projects. For the present study, purposive sampling is used for the selection of the school. The criteria for selection of school where"

- It has an inclusive set up.
- The school principal wants to bring a change.

As the researcher wanted to work by herself to find out how much multigrade teaching is effective, therefore the school environment needs to be collaborative, and this can be done under the supervision of positive leadership of school principal. Four classes were selected for the study, 4-5 and 6-7 grades, where multigrade teaching was

applied. The total number of students under study were 102, 54 in one multigrade section and 48 in other. The school was a co-education school therefore boys and girls both were there in the multigrade section.

Sample school selection was based om presence of some slow learners and inclusive students from grade 4 to 7. There was a total of 103 students who were managed comfortably. Our goal was to improve the academic performance and social development of all these students through multigrade teaching. For this purpose, we prepared four interdisciplinary lesson plans. The objectives of these plans were to enhance academic performance including strategies that have developed their social ability of all those students. Multigrade teaching was applied over a two months period through activity base learning and different activities sheets. Different activity sheets were used to enhance writing, speaking, and computing skills for slow learner. In those multigrade classrooms (Grade 4-5 and 6-7) there were different types of instruction, different activities and continuously performance checked.

Activity sheets were designed on the needs based on the prior learning which were paragraph writing. Like "Write paragraph with provided words." OR "Describe the water cycle" and "Arrange the words and make sentences" and "mathematical problems." There were all activities developed for their core subjects. (English literature 'Social Studies, Science and Mathematics) that has profound effect on academic subjects (Ardasheva et al., 2012: Akınoğlu, & Tandoğan, 2007: Hansen & Gonzalez, 2014). Researcher has set specific and achievable outcomes for each student and has focused on areas where need improvement (e.g., spelling, writing fluency, computation etc.).

Action Cycles

- **Preliminary Assessment week 1-2.**

Before the start of the cycles for two weeks researchers planned the cycles based on observations and previous scoring received from their grade cards. Data received directed the researcher to plan for multigrade teaching.

- **First Month.**

In the first month the basic focus was on writing skills and practice. Researcher used activity sheets that focused on letter formation, arranging the words, and making sentences and sentence structure. Activities included tracing, copying sentences, and filling in the blanks, reasoning questions and basic calculation. Writing time was set and arranged daily session for writing practice. One on one support was provided to students to enhance their writing skills. Positive reinforcement was applied to encourage efforts and progress. This was led by second month.

- **Second Month**

Researcher now has planned complicated writing and fluency task. More challenging task such as short paragraph and essay provided words, sequencing events and use of descriptive language were used diagram drawing, evaluation questions and problems were given to students. Each student's progress was assessed, and different activities were designed like:

- Group Activities. Paired group students and seating arrangement for collaboration writing task. Used peer review and edited session to foster cooperative learning.
- Used Technology Tools. Used digital tools and apps for enhanced writing practice. Used typing program, spelling game and words bank.
- Used a white board and reading sentence. Sentences written on a white board, read aloud again and again. Called each student and asked them to read and write sentences and words.

- **Third Month**

At the second last month assessment was planned and started to conduct to find out the effectiveness of the cycle in specific subjects like English, Science, Mathematics and Social Studies Researcher started practice and review. She used a mix of new and previous activity sheets to build up skills. Find areas where students have shown difficulty. She conducted a final assessment using writing prompt like the beginning assessment. Measured progress based on the criteria set at the beginning. Later, provided positive feedback. to students and communicated progress to parents.

Evaluation and Action Planning for Next Phase: Last Month

Data that is collected from the different activity sheets and their assessment scores before the strategies applied and after the strategies were analyzed on excel through graphs and percentages to find out the productivity in learning in an inclusive set up. The results provided directed the researcher to plan for the next phase, for next

grades and for the different subjects. Study ended by conducting a meeting provided with feedbacks to the school principal that how the study has proved to be effective for slow learners and for an inclusive setup and how the school principal would utilize it for the betterment of teaching and learning in their educational setting.

4.Data Analysis

The section here describes in detail the analysis of the data collected through observation and through their scores and highlights the efficacy of multigrade teaching in an inclusive setup. The

entire study was conducted for four months. Two multigrade sections were developed, one for 4/5 grade and other for 6/ 7 grade. The demographics of the students under study is illustrated in table :1 below:

Number of Students				
		Boys	Girls	Total
Multigrade Section 4/5	54	28	26	102
Multigrade Section 6/7	48	23	25	

Table:1 Demographics

Demographics reveal the number of students, further the total number of girls are less as compared to boys. Study started after the new academic session. Researcher planned for the strategies after discussion with class teacher and after going through with the scores of their previous assessments. As discussed in chapter 3, for two months strategies were applied and then leading to assessment and evaluation phase, so the analysis was done through comparison in scores before and after strategies and through observation

by the researcher that revealed their social and emotional development.

- **Academic Performance**

Scores obtained were analyzed on SPSS through one sample T test to find out the differences in mean scores between pre and posttest. Descriptive statistics of the scores of Sciences, S.St. and English before and after strategies applied are shown below:

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	52.1765	102	11.78135	1.16653
	posttest	71.5588	102	10.84049	1.07337

Table: 2Descriptive Statistics

Descriptive statistics revealed the mean of pretest to be reported low as compared to post test interpreting difference in academic achievement of students before and after application of multigrade teaching in inclusive classrooms.

Paired Sample Test	Mean	St. D	St. Error	t	df	Sig. (2-tailed)
pretest - posttest	-19.38235	8.60468	.85199	-22.750	101	.000

Table: 3 Paired Sample Test

A paired t-test was conducted to evaluate the difference in participants' mean scores before and after the intervention. The analysis revealed a significant improvement in scores, with the average score increasing from 52.17 (SD = 11.7) at the pre-test to71.55 (SD = 10.84) at the post-test reporting t- value to be -22.750, p=0.000(<0.05) which is significant.

- **Social and Emotional Development**

The study used the assessment scores as the effectiveness evaluation tool accompanied with the observation to find out the social and emotional development of the child. Literature suggests that slow learners face difficulties social and emotional development, they feel shy, showed lower level of esteem and confidence and face difficulty in collaboration and communication with each other (Chauhan, 2011& Karimi etal.,2017). Multigrade teaching when applied is found productive in social and emotional development. Researcher observed that slow learners in grade 6 took the leadership role and mentored grade 6 students. They started to communicate freely, mentor each other, felt confidence in presentation, started questioning and always raised their hands to answer. Their handwriting improved, and they started to work with creativity and fun. Picture below is one of the activities for Grade 4 students who previously were not able to write a single sentence but with this strategy has started to write a paragraph on his own.
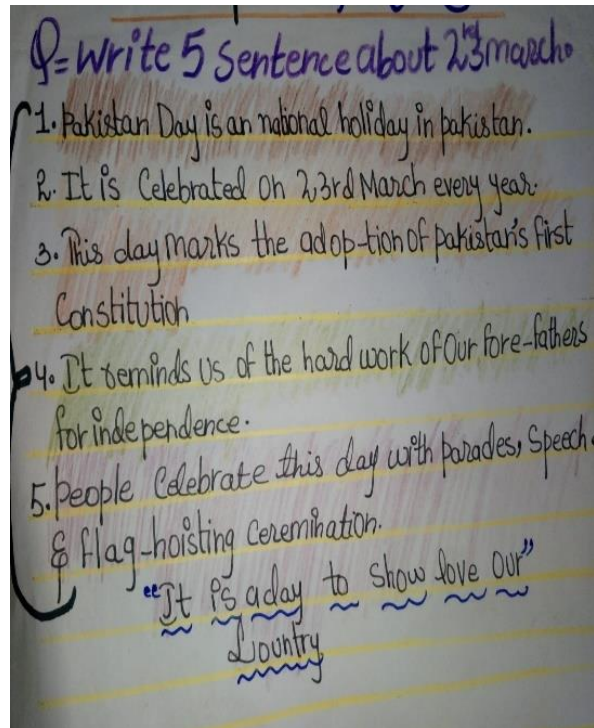

Figure 4 Sample Activity Sheet, English/4-5

The sample activity sheets proved that multigrade teaching was very successful in teaching slow learners in an inclusive set up. Overall analysis reveals that if students were allowed to sit in a setting of different grades, they would learn a lot, they would learn the concepts and it will help to develop their understanding and critical thinking skills. It also helps the students to communicate and cooperate with each other. It helped them to develop their self -esteem and cultivate a culture of collaboration where students will learn from each other under the guidance of their teachers.

5. Conclusion
The current study aims to educate the efficiency of multi grade teaching in enhancing writing skills within an inclusive educational setup. Action
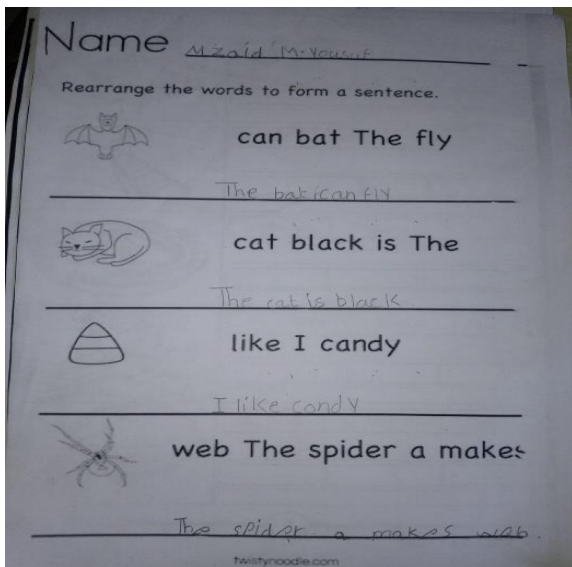

Figure: 3 Sample Activity Sheet: Social Studies/6-7

research was selected as the methodology due to its practical focus and cooperative nature. This study involved purposive sampling to select a school that met specific criteria conducive to the study's goal. Four multigrade classes (grade5-6 and 6-7) were selected totaling 44 students. The school co-educational nature provides a diverse group of students for the study.

Discussion

Students in a school's grades 4 through 7 participated in our study. One month planning was done to find out the best strategies to improve the learning abilities of children in inclusive settings for slow learners through multigrade teaching followed by action cycles for the next two months. Finally, after one month of planning, two months of execution and one month for reflection and evaluation through hands-on activities, researcher was able to receive practical findings that supported the application of multigrade teaching. multigrade section was developed by dividing actively into four to five portions within a single section and the same process was repeated for grades 6 and 7. Four core subjects were the center of focus: Science, English, Mathematics and Social Studies. Learner centered activities were conducted for those subjects. Planned strategies were applied over three months. It started with the preliminary assessment that indicates that students need to improve their basic academic skills in certain areas like letter formation, grammar, spelling, and sentence structure, logical inquiry, simple calculation. With the help of this preliminary data, researcher developed interventions and progress was gauged and monitored. Basic abilities were the focus of the first month. To inspire pupils, positive reinforcement was applied. Later on, more difficult tasks were added in the second month. Activities included using technology to improve writing and counting practice, scientific reasoning and calculation, peer reviews were conducted, and students were allowed to work in groups. A final evaluation was carried out in the third month to compare the results to the original standards. Students' academic performances and abilities have significantly improved, according to the assessment which is demonstrated by the results of paired sample t- tests.

The study showed that, in an inclusive setting, multigrade teaching greatly improved students' writing abilities. Students demonstrated significant improvements in letter formation, grammar, spelling, and sentence construction through organized and increasingly difficult activities; positive reinforcement and technology integration were critical to their development.

6. Recommendations

The study showed a few marked recommendations for different stakeholders which are discussed below:

In future it is recommended to work for extended time, as to work on slow learners require time for both teachers for their planning and reflection and for students to learn and develop their abilities. It is suggested to gather data from multiple resources and to collect interviews with parents and teachers even to know their perception as this will help to plan their cycles.

Teachers should use diversified resources and strategies that can cater to all the needs of the learners like visual aids, use of pictures and word bank to support writing task. They also need a uniform routine for daily writing task. They can apply positive reinforcement, appreciate students' efforts, provide positive feedback, and improve to build confidence. Also, they can adopt multigrade teaching strategies to accommodate a range of learning needs in a single classroom. Regularly assessment need to conduct to assess student's progress and performance to identify the areas of improvement. They need to foster a collaborative learning environment through group activities and peer reviews to enhance student engagement and learning outcomes. Parents Involvement is necessary, parents have to encourage writing practice at home under their guidance.

Parents' resistance to multigrade teaching can be either positive or negative, but once the child learns, parents can maintain the learning environment by acting appropriately or working with the teachers. They need to provide support at home. At home, encouraging and assisting the child in their writing and learning helps him to learn better. Make sure they have a comfortable space to finish their home projects. They need engagement with teachers on a regular basis to learn about your child's development and any areas that require more work. They also need to provide

positive reinforcement to inspire and support their child's efforts and writing progress, use positive reinforcement.

Policy makers should provide resources and training, provide educators resources to promote inclusive education, in addition to instruction in multigrade teaching techniques. It is recommended to create and execute policies that support inclusive education and give schools the necessary resources to implement these practices. To make sure that educational programs are meeting the needs of all students, especially in inclusive settings, it is important to set up mechanisms for ongoing monitoring and evaluation.

The suggestions and recommendations if followed will definitely assist educators, parents, and legislators in promoting inclusive and productive learning environments.

References

Ainscow, M. (2015). Struggles for equity in education: The selected works of Mel Ainscow. Routledge

Akınoğlu, O., & Tandoğan, R. Ö. (2007). The effects of problem-based active learning in science education on students' academic achievement, attitude and concept learning. *Eurasia journal of mathematics, science and technology education*, *3*(1), 71-81.

Altrichter, H., Kemmis, S., McTaggart, R., & Zuber-Skerritt, O. (2002). The concept of action research. *The learning organization*, *9*(3), 125-131.

Ardasheva, Y., Tretter, T. R., & Kinny, M. (2012). English language learners and academic achievement: Revisiting the threshold hypothesis. *Language learning*, *62*(3), 769-812.

Berliner, D. C. (1984). The half-full glass: A review of research on teaching.

Berry, C. (2000). Multigrade teaching: A discussion document. *Erişim tarihi*, *10*, 2013.

Bernhardt, P. E. (2015). 21st century learning: Professional development in practice. *The Qualitative Report*, *20*(1), 1-19.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5(1), 7-74.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn: Brain, mind, experience, and school. National Academy Press.

Bromley, M. (2023, January 25). *Leading learning: The five key roles of the teacher*. SecEd. https://www.sec-ed.co.uk/content/best-practice/leading-learning-the-five-key-roles-of-the-teacher/

Brown, B. (2010). Multigrade teaching. *A Review of Issues, Trends and Practices: Implications for*.

Chauhan, S. (2011). Slow learners: their psychology and educational programmes. *International journal of multidisciplinary research*, *1*(8), 279-289.

Cherry, K. (2022, November 16). *The Psychology of How People Learn*. Very well Mind. Verywellmind.https://www.verywellmind.com/what-is-learning-2795332

Dakhi, O., JAMA, J., & IRFAN, D. (2020). Blended learning: a 21st century learning model at college. *International Journal of Multi Science*, *1*(08), 50-65.

Dewey, J. (1916). Democracy and education: An introduction to the philosophy of education. Free Press.

Drummond, J. S., & Themessl-Huber, M. (2007). The cyclical process of action research: The contribution of Gilles Deleuze. *Action Research*, *5*(4), 430-448.

Farrell, P., Alborz, A., Howes, A., & Pearson, D. (2010). The impact of teaching assistants on improving pupils' academic achievement in mainstream schools: A review of the literature. *Educational review*, *62*(4), 435-448.

Frydenberg, M., & Andone, D. (2011, June). Learning 21st century skills. In *International Conference on Information Society (i-Society 2011)* (pp. 314-318). IEEE.

Graham, L. J. (2020). Inclusive education in the 21st century. In *Inclusive education for the 21st century* (pp. 3-26). Routledge.

Guirao, F., Lynch, F. M., & Pérez, S. M. R. (Eds.). (2012). Alan S. Milward and a century of European change (Vol. 17). Routledge

Hansen, M., & Gonzalez, T. (2014). Investigating the relationship between STEM learning principles and student achievement in math and science. *American Journal of Education*, *120*(2), 139-171.

Hargreaves, E., Montero, C., Chau, N., Sibli, M., & Thanh, T. (2001). Multigrade teaching in Peru, Sri Lanka and Vietnam: an overview. *International journal of educational development*, *21*(6), 499-520

Karimi, M., Ashori, M., & Salemi Khamene, A. (2017). Investigation of Relationship Social

Development with Emotional Intelligence and Mental Health in Slow Paced Students. *Empowering Exceptional Children*, *8*(3), 85-93.

Khazaei, L., Ahmadi, P., Rahmani, F., Bakhshi, H., Gholipour, J., & Hosseinpour, R. (2016). Challenges and disadvantages of multigrade teaching: Qualitative research.

Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. System, 23(2), 175-181

Little, A. W. (2001). Multigrade teaching: towards an international research and policy agenda. *International Journal of Educational Development*, *21*(6), 481-497.

Lindsay, G. (2003). Inclusive education: a critical perspective. *British journal of special education*, *30*(1), 3-12.

McLeskey, J., & Waldron, N. L. (2002). Professional development and inclusive schools: Reflections on effective practice. The Teacher Educator, 37(3), 159-172.Messiou, K. (2017). Research in the field of inclusive education: time for a rethink?. *International journal of inclusive education*, *21*(2), 146-159.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. Teachers College Record, 108(6), 1017-1054.

Mulryan-Kyne, C. (2007). The preparation of teachers for multigrade teaching. *Teaching and teacher education*, *23*(4), 501-514.

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

Qian, M., & Clark, K. R. (2016). Game-based Learning and 21st century skills: A review of recent research. *Computers in human behavior*, *63*, 50-58.

Rapoport, R. N. (1970). Three dilemmas in action research: with special reference to the Tavistock experience. *Human relations*, *23*(6), 499-513.

Soofi, Z., & Akhtar, R. N. (2015). Teachers' Perceptions: Multigrade Classrooms in Primary Schools of Pakistan. *Kashmir Journal of Language Research*, *18*(3).

Spelke, E. S., & Kinzler, K. D. (2009). Innateness, Learning, and Rationality. *Child Development Perspectives*, *3*(2), 96–98. https://doi.org/10.1111/j.1750-8606.2009.00085.x

Tenenbaum J, Griffiths T, Kemp C. Theory-based Bayesian models of inductive learning and reasoning. *Trends in Cognitive Sciences.* 2006

Thomas, C., Shaw, C. P., & Mundial, B. (1992). Issues in the development of multigrade schools (Vol. 23). Washington, DC: World Bank

Tomlinson, C. A. (2001). How to differentiate instruction in mixed-ability classrooms. ASCD.

UNICEF. (1999). the progress of nations, 1999. UNICEF.

Ysseldyke, J. E., Thurlow, M. L., Wotruba, J. W., & Nania, P. A. (1990). Instructional arrangements: Perceptions from general education. Teaching Exceptional Children, 22(4), 4-8.

Youngs, C. S., & Youngs Jr, G. A. (2001). Predictors of mainstream teachers' attitudes toward ESL students. *Tesol Quarterly*, *35*(1), 97-120.