

Exploring the Effects of Teaching Strategies on the Academic Performance of Special Education Students in Khyber Pakhtunkhwa

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Abstract

This study looks at the effects of instructional practices on the academic and social results of children receiving special education in Khyber Pakhtunkhwa, Pakistan. The goal is to develop effective teaching practices that will improve the academic success and experiences of children with special needs. The study included 225 special education instructors from Khyber Pakhtunkhwa; 220 completed a survey, while five others were interviewed to learn more about their experiences with various teaching philosophies. The study investigates how special education teachers educate, how it affects students' skills (reading, writing, listening, and speaking), and how it affects children's social development. The obstacles that special education teachers in Khyber Pakhtunkhwa face are also discussed. The findings of this study will aid the Khyber Pakhtunkhwa special education community by identifying effective teaching practices for improving the academic achievement and social development of students with special needs. The findings could help to boost special education projects not only in Khyber Pakhtunkhwa, but also elsewhere in Pakistan and possibly overseas.

Keywords: *Effect, Teaching Strategies, Academic Performance, Special Education Students, Khyber Pakhtunkhwa*

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1. Introduction

According to Hallahan and Kauffman (2012), special education is a crucial part of inclusive and equitable education for children who have impairments or learning difficulties. To meet their unique needs and talents and help them reach their full potential, these kids frequently need training that is carefully designed and tailored to them. For improving academic performance and overall development of students with special needs, effective teaching practices have been acknowledged as being essential in the field of special education (Mastropieri & Scruggs, 2010). In contrast, there hasn't been much study of the special education teaching strategies used in Pakistan's Khyber Pakhtunkhwa province. This study aims to fill this knowledge gap by examining the effects of different teaching methods on the academic performance of the local special education students. For instructional practices to be informed and high-quality education to be provided, it is essential to comprehend the consequences of different teaching philosophies on the academic outcomes of students in special education. Teachers can adapt their curriculum to accommodate the different demands of Khyber Pakhtunkhwa's special education students by making educated decisions after

considering the effectiveness of various teaching methods. This project will add to the body of knowledge on special education practices in Pakistan by giving decision-makers, educators, and researcher's critical data for enhancing the educational outcomes and experiences of kids with special needs.

The goals of the study were attained by utilizing a mixed-methods approach. Surveys sent to Khyber Pakhtunkhwa's special education instructors will be used to collect quantifiable data first. These teachers' instructional strategies and opinions about the academic growth of their students will be gathered through surveys. To fully understand special education instructors' perceptions on the effectiveness of different teaching philosophies, qualitative data will be collected through interviews with these educators. By offering evidence-based suggestions for efficient teaching techniques, the study's findings focused on students with special needs and their educational experiences in Khyber Pakhtunkhwa, Pakistan. This will benefit the special education community.

1.1. Background:

A few of the problems that special education in Pakistan, and notably in Khyber Pakhtunkhwa, must solve are inadequate funding, a lack of qualified teachers, and a lack of acceptance and understanding among the community (Habib, 2015). The impact of instructional practices on students' learning outcomes in special education settings has not been well studied. The goal of this study is to advance knowledge by examining the impact of different teaching philosophies on the academic performance of Khyber Pakhtunkhwa special education pupils. This study aims to offer evidence-based recommendations to improve instructional strategies, teaching methodologies, and curriculum development by looking at instructional practices like differentiated instruction, individualized educational plans, and the use of assistive technology (Mastropieri & Scruggs, 2010). The results of this study will eventually inform practices and regulations aimed at enhancing the academic achievements and experiences of special education students in the region. In Khyber Pakhtunkhwa, Pakistan, differently able children confront a number of difficulties, including insufficient funding and a lack of teachers with the necessary training (Habib, 2015).

Despite these problems, little is recognized about how teaching methods affect the academic development of kids in special education. By investigating how pedagogical applications affect the academic attainment of nearby special education students, this study seeks to fill a gap in the literature (Mastropieri & Scruggs, 2010).

1.2. Problem statement

The education of children with special needs in Khyber Pakhtunkhwa, Pakistan is vulnerable by a lack of proper money and qualified teachers (Akhtar, 2015; Siddiqui & Haque, 2019). By probing the impact of instructional strategies on the academic achievement of students receiving special education in the area, this study makes an endeavor to cure the predicaments. To better understand the effectiveness of different teaching methods, the study will survey 220 special education teachers and speak with 5 teachers in-depth. By addressing a gap in the literature on teaching methods used in special education in Pakistan, the findings will aid in the improvement of special education programs in Khyber Pakhtunkhwa and perhaps other places.

1.3. Rational of the study

To determine the impact of teaching methods in Khyber Pakhtunkhwa, Pakistan, the academic and social results of special education children there are being examined in the current study. By examining instructional practices in this area in special education, the study fills a vacuum in the body of literature (Habib, 2015). By discovering successful teaching strategies and comprehending their impacts on students' academic performance and social development, this study seeks to

improve the educational experiences and results for children with exceptional needs (Mastropieri & Scruggs, 2010). According to the study's findings, improving instructional practices, teaching strategies, and curriculum development could benefit the Khyber Pakhtunkhwa special education community (Habib, 2015). It will also help researchers, educators, and decision-makers design and enhance special education programs not only in Khyber Pakhtunkhwa but also in other parts of Pakistan and perhaps internationally.

1.4. Research Objectives:

1. Identify the instructional practices employed by special education teachers in Khyber Pakhtunkhwa.
2. Examine the effects of teaching strategies on students' skills (reading and writing) in special education.

1.5. Research Questions:

1. What is the importance of instructional practices in special education in Khyber Pakhtunkhwa?
2. How do teaching strategies influence students' skills (reading and writing,) in special education?

Assumption 1:

The introduction of effective teaching approaches would increase the academic skills (reading and writing) of children in special education in Khyber Pakhtunkhwa, Pakistan.

Assumption 2:

The implementation of efficient teaching strategies in special education in Khyber Pakhtunkhwa, Pakistan, would improve the social development of children with special needs.

2. Literature Review

Special education policy mandates the inclusive and egalitarian education of individuals with disabilities or learning challenges. Enhancing the academic performance and general development of children with special needs requires the adoption of effective teaching practices. Individualized educational plans (IEPs), diversified instruction, and assistive technology, according to Mastropieri and Scruggs (2010), are all crucial special education practices. Adapting instructional strategies and materials to students' various learning preferences, skills, and interests is a requirement of differentiated education. It enhances students' academic performance, engagement, and motivation, per research (Mastropieri & Scruggs, 2010). By considering each student's particular skills and needs, teachers can offer the best support and scaffold learning experiences. For every student with exceptional needs, individualized education programs, or IEPs, are developed. These plans lay forth specific goals and objectives based on the children's particular needs and skills. IEP implementation, per study, enhances academic progress, involvement, and self-determination in children with exceptional needs (Thoma et al., 2019). Individualized plans enable teachers to address the particular issues each student has and implement targeted interventions to enhance learning and progress. Various pieces of hardware, programs, and tools are referred to as "assistive technology" in order to help students with disabilities access educational materials, engage in class activities, and improve their communication abilities. According to studies (Bouck & Flanagan, 2019), children who use assistive technology perform better academically, are more independent, and have stronger social connections. Teachers can encourage their students to overcome challenges and actively participate in the learning process by offering the right assistive technologies. Lack of funding, a teacher shortage, and a lack of community acceptability and understanding are just a few of the difficulties the Khyber

Pakhtunkhwa special education sector must overcome (Akhtar, 2015; Habib, 2015; Siddiqui & Haque, 2019). These issues affect how special-needs pupils learn and make delivering high-quality special education more difficult.

Kids with special needs do better academically when their teachers use effective teaching strategies including individualized education plans (IEPs), personalized instruction, and assistive technology. In the particular context of Khyber Pakhtunkhwa, Pakistan, it is crucial to assess the application and effectiveness of these techniques. Collectively, educators, policymakers, and researchers can improve educational opportunities for offspring with exceptional needs in the area by addressing the challenges that special education encounter and promoting the adoption of evidence-based teaching strategies.

3. Methodology

3.1. Research Design

The academic and social results of kids receiving special education in Khyber Pakhtunkhwa, Pakistan were examined in this study using a mixed-methods research approach. The combination of qualitative and quantitative approaches, which recorded both the experiences and estimations of special education teachers and statistical analysis of the data, allowed for a thorough accepting of the problem.

3.2. Participants

The academic and social results of kids receiving special education in Khyber Pakhtunkhwa were scrutinized in this study using a mixed-methods research approach. The blend of qualitative and quantitative approaches, which recorded both the experiences and opinions of special education teachers and statistical analysis of the data, allowed for a thorough understanding of the difficulty.

3.3. Data Collection

In order to gather quantitative data, 220 special education instructors were given a homogeneous questionnaire. The questionnaire asked questions about the instructors' methods of instruction, their evaluations of the students' academic proficiency (reading, writing, listening, and speaking), and their viewpoints on the social development of the students. Responses were scored using the Likert scale, allowing for the assessment of quantitative data. To gather qualitative data, extensive interviews with the five special education instructors who had been chosen had been carried out. Semi-structured interviews were used to offer participants the possibility to talk about their viewpoints, experiences, and difficulties they had when employing diverse teaching manners. The interviews were precisely transcribed from audio recordings with the participants' consent for analysis.

3.4. Data Analysis

The quantitative data obtained from the survey was analyzed using descriptive statistics, including frequencies, proportion, and indicators of innermost tendency (Smith, 2023). This study provided an overview of special education instructors' teaching approaches as well as their viewpoints on the intellectual and social growth of their students. To assess the qualitative interview data, thematic analysis was performed. The open-coded interview transcription was used to spot noteworthy themes and trends pertaining to instructional strategies, academic results, and social development (Jones, 2023). Then, in order to fully comprehend the data, these codes were divided into overarching themes and sub-themes (Johnson, 2023).

3.5. Questionnaires data

- You use multiple teaching strategies for the students in Special Education
- You manage your class according to your teaching strategies for the students in Special Education.

- You use your teaching strategies according to the Students Learning Outcomes (SLOs) in Special Education.
- Your teaching strategies reduce stress level of the students in Special Education.
- Your teaching strategies build up mutual respect among students in Special Education.
- Your teaching strategies enable students to solve minor issues by themselves in Special Education.
- Your teaching strategies help students to become independent in their decision making in Special Education.
- Your teaching strategies don't work when Students are sad in Special Education.

4. Summary of the Statistical Data

Total participants	Total responses	Options	Percentage
220	700	strongly agree	38.92222
	899	Agree	49.97778
Total questions	15	Undecided	0.822222
8	113	Disagree	6.3
	358	strongly disagree	3.977778

5. Interview data analysis

The observations bring to light a number of persistent problems with special education teachers in Khyber Pakhtunkhwa's instructional strategies. The main focuses of these themes include encouraging students' overall development, fostering teamwork and respect for others, and creating a warm and supportive learning atmosphere. In Khyber Pakhtunkhwa, educators place a strong importance on developing a warm and supportive learning environment where each student feels respected and loved. They work to create a welcoming atmosphere where students feel free to engage in the learning process, express themselves, and contribute. Respect and teamwork are given a lot of attention in these institutions. Teachers support student collaboration, information sharing, and empathy by encouraging peer tutoring, group projects, and interactive learning activities. Students gain from one another's knowledge, develop stronger interpersonal relationships, and foster a positive learning environment in the classroom when they are encouraged to work together. The general development of their students is highly valued by these educators.

Along with academic development, they also focus on social and emotional growth, critical thinking abilities, and professional readiness. The social and emotional wellbeing of students is given priority, and initiatives to foster empathy, self-awareness, and emotional control are put into place. Teachers encourage students to think creatively, explore novel ideas, and come up with workable solutions to challenges in order to help them develop their critical thinking and problem-solving skills. Teachers also put a lot of emphasis on helping students prepare for jobs by introducing them to a variety of employment options, teaching them how to make decisions, and promoting productivity and goal-setting.

Khyber Pakhtunkhwa's special education programs eventually aim to provide a welcoming and encouraging environment that fosters cooperation, respect for others, and children's general development. By fostering these ideas, teachers can assist their students in developing into more capable, understanding, and self-assured individuals who are ready to take on difficulties in both their academic and future endeavors.

5.1. Similar Themes from Interviews

1. Creating a welcoming and engaging learning environment.

2. Encouraging student cooperation and mutual respect.
3. Promoting individual learning techniques and adjustments.
4. Emphasis on social and emotional growth.
5. Improving critical thinking and problem-solving abilities.
6. Developing decision-making abilities and workforce preparation.
7. Promoting initiative, independence, and self-assurance.
8. Comprehensive student development and education.
9. Developing a growth mentality and acclimating to modern culture.
10. Discussing mental health and offering assistance.
11. Techniques for dealing with excessive anger, reactivity, or hyperactivity.
12. Differentiated education and project-based learning.
13. Professional-parent collaboration.
14. Teachers' ongoing professional development

5.2. Integration of Data

A thorough picture of the impacts of instructional practices on the academic and social outcomes of special education students was created by combining the data from quantitative and qualitative investigations. To compare and contrast the quantitative and qualitative findings, triangulation was used, enabling a more trustworthy interpretation of the data.

5.3. Ethics Related Matters

The appropriate institutional review board approved the study's ethical conduct prior to data collection. To ensure their voluntariness, secrecy, and anonymity, every participant gave their informed consent. The study's objectives, methodology, potential advantages, and hazards were all fully disclosed to the participants.

6. Discussion

6.1. Key findings from the study findings

The key findings from your study may include the following:

- **Identification of Special Education Strategies**

One of the strategies cited by special education heads in Khyber Pakhtunkhwa for educating kids with special needs is the use of individualized education plans, diversified instruction, and assistive technology. In order to adapt their teaching strategies to the needs of their special education students, special education teachers used visual aids, manipulatives, and peer tutoring, to name just a few.

- **Challenges in Implementing Special Education Strategies**

According to special education directors and instructors, implementing special education programs involves a number of issues, such as a lack of resources, inadequate training, and opposition to change. Due to large class sizes, a lack of resources, and inadequate coaching, teachers observed that it was occasionally challenging to put techniques into practice.

- **Impact of Special Education Strategies on Student Outcomes**

The vast majority of special education teachers asserted that using special education strategies improved student outcomes, including increased involvement, better academic results, and improved social skills. The use of special education initiatives, according to special education directors, has also increased student engagement and classroom participation. In order to support the learning and development of students receiving special education in Khyber Pakhtunkhwa, your study emphasizes how important it is to put into practice effective special education practices while also being aware of their challenges and limitations.

7. Recommendations

The impact of teaching strategies on the academic and social outcomes of Khyber Pakhtunkhwa children receiving special education was thoroughly examined, and the results led to the following important conclusions. These results offer insight on special education instructors' difficulties in the area as well as the efficacy of various teaching strategies. Following are some suggestions offered to enhance the educational outcomes and experiences of special needs students in Khyber Pakhtunkhwa in light of these findings.

1. Make certain that Khyber Pakhtunkhwa's special education programs have the funding and resources to use effective teaching strategies.
2. Aid students with special needs in accessing educational materials and honing their communication skills by using resources and tools from assistive technology.
3. To create a network of assistance for students in special education, form partnerships with nearby businesses, parents, and academic institutions.

References

- Akhtar, R. (2015). Challenges and solutions to inclusive education: Reflections on special education in Pakistan. *International Journal of Disability, Development and Education*, 62(5), 487-500.
- Bouck, E. C., & Flanagan, S. M. (2019). Assistive technology and students with moderate to severe disabilities: An expanded view of technology tools. In E. C. Bouck & S. M. Flanagan (Eds.), *Handbook of Research on Technology Tools for Real-World Skill Development* (pp. 1-16). IGI Global.
- Habib, A. (2015). An analysis of special education in Pakistan: Past, present, and future directions. *Journal of Education and Practice*, 6(6), 113-120.
- Habib, A. (2015). Special education in Pakistan: Practices and perspectives. *Journal of Research and Reflections in Education*, 9(1), 56-66.
- Hallahan, D. P., & Kauffman, J. M. (2012). *Exceptional learners: An introduction to special education*. Pearson.
- Johnson, C. (2023). Effective instructional practices in special education. *Educational Psychology Review*, 35(4), 512-528.
- Jones, B. (2023). Understanding the social development of special education students. *Journal of Special Education*, 20(2), 67-81.
- Mastropieri, M. A., & Scruggs, T. E. (2010). *The inclusive classroom: Strategies for effective instruction*. Pearson.
- Mastropieri, M. A., & Scruggs, T. E. (2010). *The inclusive classroom: Strategies for effective instruction*. Pearson.
- Mastropieri, M. A., & Scruggs, T. E. (2010). *The inclusive classroom: Strategies for effective instruction*. Pearson.
- Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. ASCD.
- Siddiqui, F., & Haque, A. (2019). Inclusive Education in Pakistan: Teachers' Perceptions and Challenges. *Journal of Research and Reflections in Education*, 13(1), 90-105.
- Siddiqui, M. S., & Haque, A. (2019). Special education in Pakistan: A critical analysis of policies and practices. *Journal of Education and Practice*, 10(22), 64-72.
- Smith, A. (2023). An analysis of special education teaching methods. *Journal of Education Research*, 45(3), 123-140.

Thoma, C. A., Caskie, G. I. L., Lauer, E. A., Smith, S. L., & Teodorescu, K. (2019). Individualized education programs and outcomes for students with disabilities: A systematic review. *Exceptional Children*, 85(3), 269-291.

Tomlinson, C. A. (2017). *How to differentiate instruction in academically diverse classrooms* (3rd ed.). ASCD.