INCLUSIVE EDUCATION AT SECONDARY LEVEL IN ISLAMABAD: PROSPECTS AND CHALLENGES



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It is hereby declared that the author of the study has completed the entire requirement for submitting this research work in partial fulfilment for the degree of MS Education. This thesis in its present form is the author's original work expecting those acknowledged in the text. The material included in the thesis has not been submitted wholly or partially for the award of any other academic certification than for which it is being presented.

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The thesis titled "Inclusive Education at Secondary Level in Islamabad: Prospects and Challenges" submitted by Ms. Tayyaba Waseem Abbasi Reg # 416-FSS/MSEDU/F21 is partial fulfillment of MS degree in education has been completed under our guidance and supervision. We are satisfied with the quality of her research work and allow her to submit her thesis for further process of approval as per IIUI rules and regulations.

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DEDICATION

To my beloved mother Najma, father Waseem Ahmad, my loving spouse Saif, my

supportive in-laws, and my dearest friends Saba, Asma, Farheen & Tanzeela.

This thesis is dedicated to all of you who have been my unwavering support pillars.

Your belief in me, constant encouragement, and unwavering presence have been the

driving force behind my academic journey. I am forever grateful for your love,

understanding, and motivation that have pushed me to overcome challenges and

achieve this milestone. This dedication is a small token of my immense gratitude for

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Abstract

Inclusive education removes barriers and enables all students, including the previously excluded group, to learn and participate effectively within the general school education system. The study aimed to examine the prospects and challenges of inclusive education at the secondary level in Islamabad. The study objectives were (1) To examine the current status of inclusive education. (2) To explore the perceptions of teachers regarding the prospects of inclusive education at the secondary level in Islamabad. (3) To explore the perceptions of principals & teachers regarding challenges faced in implementing inclusive education in schools. (4) To find out possible solutions for the successful implementation of inclusive education. The proposed study was intended to answer these research questions (1) What is the current status of inclusive education? (2) What are the prospects of inclusive education? (3) What sort of challenges schools are facing in implementing inclusive education in schools? (4) How challenges of inclusive education can be overcome and inclusive education be implemented successfully? Mixed method research (quantitative and qualitative) was used to conduct this study. The research paradigm was post-positivism. The study was delimited to an urban area and Islamabad Model Schools for Girls. The population was the principals and teachers from Girl's secondary schools situated in urban areas. A total of 19 principals and 466 teachers were population of this study. A universal sampling technique was used for principals and 210 teachers were randomly selected from the population. Two instruments were used for data collection i.e., a Self-developed questionnaire on a five-point Likert scale, consisting of 49 items was used for this proposed study and a semi-structured interview consisting of six questions. A closeended questionnaire was used to explore the prospects and challenges of inclusive education by taking the perceptions of secondary school teachers and a semi-interview was used to explore challenges and to find out the possible solutions for the successful implementation of inclusive education from school principals. Quantitative data were analyzed by descriptive statistics (mean scores) while qualitative data were analyzed in the form of thematic analysis and interpreted in narrative form. Major findings of the study showed that teachers generally have a positive outlook on the prospects of inclusive education, emphasizing its potential benefits in academic, social, and personal development, as well as its role in promoting equality and acceptance of diversity within educational settings. Moreover, the findings shed light on the state of inclusive

education in mainstream schools, concerns were raised about the lack of ramps, elevators, wheelchair-accessible pathways, and accessible washrooms, which hindered the mobility of physically disabled students. It was also found that specialized equipment such as braille materials, spectacles, hearing aids, and wheelchairs were often lacking but considered essential for inclusive education. Findings revealed that school principals suggested possible solutions for the successful implementation of inclusive education that proper resources, budget and facilities may be provided. They stressed the need for teacher training and the development of an inclusive curriculum. The findings highlighted both progresses made and challenges faced in implementing inclusive education in mainstream schools. It was concluded that teachers provide individual attention, create remedial classes, and develop individualized lesson plans to support disabled students. Visual aids were commonly used to assist these students. It was concluded that there are mixed perspectives on the current status of inclusive education. Few principals said that it is being practised in schools, while the majority believe challenges are hindering its true implementation. So, to ensure successful inclusive education, it is crucial to address these challenges by providing proper resources, budget, infrastructure, and trained teachers. Based on the findings of the study, it is recommended to prioritize the allocation of necessary resources, budget, infrastructure, and teacher training to ensure its effective implementation and success.

Keywords: Inclusive education, secondary level, Islamabad, prospects, challenges

CHAPTER 1

INTRODUCTION

All children, including those with a disability, can learn together via education. Children with minor disabilities have a fundamental right to an education in a regular classroom alongside their peers of children of the same age. The teaching should consider all students' unique skills and needs to make the children reach their full potential as they all are capable of learning, as acknowledged by Inclusive Education (IE) (Government of Pakistan, 2009).

According to UNESCO (2005) through higher engagement in learning, cultures, and communities, inclusive education acknowledges and responds to the variety of needs of all students while lessening exclusion and segregation inside and from education.

In Pakistan, the concept of inclusive education is gradually gaining ground, but it's not yet fully established. The government, recognizing its importance, has outlined inclusive education goals in policies like the National Education Policy (NEP) and Pakistan Vision 2025. These documents emphasize providing equal educational opportunities to all children, regardless of their background or disabilities. Additionally, the National Economic Council (NEC) under Pakistan Vision 2025 underscores the significance of inclusive education for sustainable economic growth. While there have been initiatives, such as the draft of the Inclusive Education Policy by the Ministry of Federal Education and Professional Training. However, concrete steps, like implementing the Inclusive Education Policy, are still pending. However, despite these intentions, the translation of policy commitments into practical implementation poses significant challenges for the education system in Pakistan (Muhammad, Bokhari & Anis 2024).

1.1 Background of the Study

Around the mid-twentieth century, the concept of inclusive education began to gain traction. Around the middle of the 20th century, the idea of inclusive education began to take hold. Scandinavian nations set the bar for this new inclusivity paradigm. However, at the worldwide level, in 1994, after a meeting held by UNESCO, the idea of inclusive education was publicly presented and accepted on a global scale through the Salamanca Declaration.

Usually, in most underdeveloped countries, including Pakistan, children with disabilities or children with special needs get their education and training through distinct curricula and in separate institutions. From all across the world, experts have now realized the adverse outcomes of wholly separating children with disabilities from other children. This exclusion or segregation prevents children with special needs from reaching their full potential and makes integration and mainstreaming difficult for them. This awareness has given birth to inclusive education (Government of Pakistan, 2017).

IE aims to deliver all students with equal educational opportunities in a welcoming environment and eradicate prejudice or discrimination based on gender, the financial position of parents, and diversity in physical characteristics and mental aptitudes.

According to UNESCO (2005), Inclusion is a process of reducing exclusion within cultures and communities and from education by addressing and reacting to children with diverse needs through increased participation in learning.

Inclusion is a concept that revolves around the idea of students being educated together, without substantial separation or differences in their educational experiences compared to their peers. It is widely recognized that inclusion cannot exist in

environments where some students are educated separately or in significantly different ways from others. To clarify, inclusion is not:

- 1. Educating students part-time in special schools and part-time in regular schools.
- 2. Placing students in mostly segregated settings within regular schools.
- 3. Having students in regular classes but requiring them to follow substantially different courses of study compared to their peers (Loreman, Deppeler & Harvey, 2010).

In essence, inclusion means that all students in a class are actively involved in all aspects of schooling. It requires regular schools and classrooms to be flexible and willing to adapt to meet the needs of all students. Inclusion also involves appreciating and celebrating differences among students, whether those differences are related to gender, culture, abilities, sexual orientation, socio-economic background, religion, or any other factors affecting learning and development.

This definition of inclusion does not imply that students with diverse learning needs won't receive specialized assistance or teaching outside of the classroom when necessary. Rather, it recognizes that such support is one of the options available to and required for all students. Providing extra help during the school day should be a common practice for all students (Loreman, Deppeler & Harvey, 2010).

Inclusive education is different from integration and mainstreaming because it focuses on the child's right to participate & schools' duty to accept them. It rejects the use of special schools or classrooms that separate students with disabilities from those without disabilities. Inclusion emphasizes the full participation of students with disabilities and respects their social, civil and educational rights. It also equips them with skills that are applicable both inside and outside the classroom (Ranjan, 2014).

Pakistan signed the Convention 2011, Article 24 of UNCRPD, which obliges the state government to guarantee educational opportunities to all disabled children. It also ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all (Mehrukh et al., 2022).

To help children from all groups, not only those with disabilities, Pakistan needs to work toward establishing an inclusive society. Such societies foster tolerance, acceptance, and respect for variety. Children who require special attention can succeed in inclusive schools that offer supportive, context-appropriate learning environments, but separate education systems cannot guarantee success for these kids.

In Pakistan, inclusive education is making progress step by step. Training programs are also focusing on the concept of inclusive education in the field of education research. Experts and researchers are putting forth their recommendations for inclusive education, as it allows special needs students to excel alongside their peers. However, there is still some ambiguity surrounding the idea of inclusive education (Basit, 2022). The perception of principals and teachers regarding inclusive education is not yet clear and there is a diverse range of opinions on the matter.

In Pakistan, a collaborative effort between Sight Saving International, the Ministry of Social Welfare, the Special Education Department (SED), the Federal Directorate of Education (FDE), and the Ministry of Education led to the initiation of a pilot project on inclusive education. This project was implemented in 16 mainstream schools, catering to both boys and girls. The primary objectives were to raise awareness, provide inclusive education training to principals and instructors, and organize workshops and seminars for consultation. The pilot project had positive outcomes, including increased stakeholder awareness and motivation, higher participation and enrollment of disabled children, and improved moral sense, social interaction,

confidence, and academic performance among students. These experiences demonstrate the feasibility of inclusive education in Pakistan with proper support and resources, as well as the positive impact of training on teachers' acceptance of student diversity (Abbasi, 2012).

But after that in Pakistan, when the pilot project ended no further progress was made regarding inclusive education. Progress is only mentioned in policies & plans but practically no full implementation & resource provision. Based on the analysis of Inclusive practices, Bughti & Kazimi (2022) found that school heads did not take significant initiatives or adopt effective practices to ensure successful inclusion. This indicates a negative attitude towards the inclusion process among school heads. In particular, the heads of public primary-level schools were unwilling to implement inclusive education. Additionally, they mentioned that students with disabilities and their typically developing peers could not learn together due to their differing needs and the requirement for additional support.

1.2 Problem Statement

Inclusive education is important and direly needed to provide equal education to all children and to meet Sustainable Development Goal 4 (SDG 4). Inclusive education if not provided, disabled students will suffer the most. They may face exclusion, discrimination and limited opportunities for learning & social interaction. The government of Pakistan has made efforts to implement the process of IE by launching a pilot project to provide inclusive education to children with minor disabilities. The pilot project was launched in 2003 and ended nearly by the year 2012. Still, the need for inclusive education exists. There is the need for a deeper understanding of the specific reasons behind the limited implementation of inclusive education in schools. It is required and is still important to cater for the needs of children

having a minor disability. So, this study aimed to analyze the current status of IE and the challenges that are hampering the successful implementation of IE. Moreover, the study was intended to explore the prospects of inclusive education.

1.3 Objectives of the Study

The objectives of the study were

- 1. To examine the current status of inclusive education.
- 2. To explore the perceptions of teachers regarding the prospects of inclusive education at the secondary level in Islamabad.
- 3. To explore the perceptions of principals and teachers regarding challenges faced in implementing inclusive education in schools.
- 4. To find out possible solutions for the successful implementation of inclusive education.

1.4 Research Questions

Questions answered by this study were

- RQ 1 What is the current status of inclusive education?
- RQ 2 What are the prospects of inclusive education?
- RQ 3 What sort of challenges schools are facing in implementing inclusive education?
- RQ 4 How challenges of inclusive education can be overcome and inclusive education be implemented successfully?

1.5 Significance of the Study

This study, concerned with the prospects and challenges of inclusive education at the secondary level, provides necessary information regarding the current status of inclusive education. The study's findings help the Ministry of Education, school authorities, administrators, policymakers, and teachers in mainstream schools.

The study's findings advise and enlighten competent authorities, administrators, and policymakers for improved planning and decision-making about the successful implementation of IE in Pakistan. The study also aids in establishing curriculum development, objectives, and techniques in the schools that are consistent with their inclusive vision and core values. It is helpful to readers of publications on education and those in need of inclusive education. Furthermore, the teachers are prepared with the information and approaches to handling and addressing the various learner needs in their classroom and the institutional setting.

1.6 Delimitation(s) of the study

The study was delimited to

- The urban area of Islamabad.
- Islamabad Model School for Girls.

1.7 Operational Definition

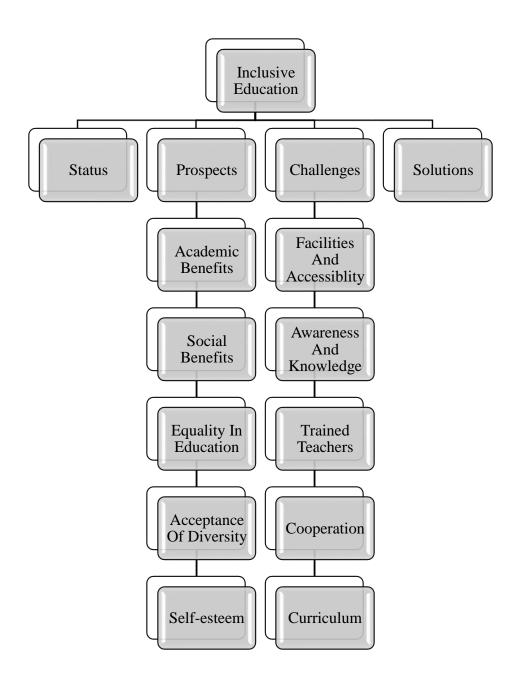
1.7.1 Inclusive Education

Inclusive education (IE) is the process of focusing and reacting to the diverse needs of all learners via enhanced engagement in learning and social interactions. It encourages the personal, intellectual, and social growth of all students. Essentially, inclusive education is about providing equal access to education and opportunity by providing a fully accessible environment, facilities, appropriate curriculum, and educated and skilled instructors.

1.8 Conceptual Framework

Figure 1.1

Conceptual framework



Indicators of inclusive education taken from (Fareo, 2020)

1.9 Research Methodology

Mixed method research (Quantitative and Qualitative methods) was used to conduct this study. The research design was a convergent mixed-method design. The research paradigm was post-positivism.

1.9.1 Population

The population of the study was secondary-level school teachers and principals in Islamabad. The researcher personally visited the Federal Directorate of Education to collect information on the population (2022).

1.9.2 Sample and Sampling Technique

The study sample was 19 school principals in Islamabad and 210 teachers according to Gay's (2005) population table from the targeted population. A universal sampling technique was used for principals. A simple random sampling technique was used to select the teachers. Moreover, the number generator method was used to draw the sample of the teachers.

1.9.3 Research Instruments

Two instruments were used to collect the data. Self-developed questionnaire on a five-point Likert scale, consisting of 49 items for teachers. Semi-structured interview guide consisting of six questions for principals.

1.9.4 Data Collection

A questionnaire was distributed personally by the researcher for data collection.

Data were collected through personal visits of the researcher. The interview was taken personally by the researcher, by visiting principals' offices. Interviews were recorded

on the electronic device. The participants were briefly instructed about the purpose of the study.

1.9.5 Data Analysis

Data obtained from teachers were analyzed through descriptive statistics (mean scores) and data obtained through interviews with school principals were analyzed in the form of thematic analysis.

CHAPTER 2

LITERATURE REVIEW

Inclusion is realizing and recognizing that all individuals are equal even though they have their own set of strengths and weaknesses.

IE is a creative method to teach children with minor disabilities and learning issues alongside their classmates under the same roof. It gathers all students into one classroom and society, no matter what skills or deficiencies in any area they have, and aims to maximize all students' potential (Singh, 2016).

According to UNESCO (2005), IE means that all children, including disabled and normal children, working children, children from distant regions, and children from other disadvantaged or underrepresented groups, should be accommodated in mainstream schools.

2.1 Inclusive Education (IE)

As an approach, IE attempts to fulfil the learning requirements of all children, teens, and adults, with particular attention on the neglected. It implies that all learners, either disabled or not, may study together through having access to shared preschool programs, schools, and community educational environments, as well as a good range of services and support. This is only possible and achievable in an adaptable education system that acknowledges and adjusts to the demands of a diverse group of students. It seeks for all system stakeholders to be at ease with diversity and regard it as an opportunity, not a problem. It is about all learners studying together, even if their learning styles and speeds differ. It is an active process since it targets all elements of child growth, including psychological, physical, cognitive, imaginative, and interpersonal development (Abbasi, 2012).

2.2 What is Inclusive Education

It is important to understand what is and is not inclusive education

- Exclusion: This occurs when students with disabilities are completely denied access to any form of education.
- **Segregation:** In this approach, students with disabilities are educated in separate environments that are specifically designed for them, isolating them from students without disabilities
- **Integration:** Integration involves placing students with disabilities in mainstream educational institutions without making necessary adaptations, expecting them to fit in without proper support.
- Inclusion: True inclusion involves creating education environments that adapt the design, physical structures, teaching methods, curriculum, culture, policies, and practices to ensure accessibility for all students without discrimination. Placing students with disabilities within mainstream classes without these adaptations does not constitute true inclusion.

Inclusion goes beyond mere placement and emphasizes creating an inclusive culture and providing the necessary support and accommodations to ensure that all students can fully participate and succeed in their educational journey (UNICEF, 2017).

2.3 Concept of Inclusive Education

Inclusive education is to include all children in classroom activities without regard to their physical, social, linguistic, emotional, or intellectual ability. The goal of inclusive education is to respond positively to the various needs of all persons in the learning process via involvement in communities, cultures, and learning activities, as well as to stop the exclusion of some groups from education. This process comprises changes in content, tactics, and approaches intending to include all children in the

educational process with the notion that states are responsible for providing education to all children (Ahmad et al., 2020).

Inclusion is not the same as mainstreaming or integrating. Mainstreaming and integration need the placement of two independent educational systems, and students spend just a portion of their time in normal education classrooms, most commonly in non-academic subjects.

Furthermore, with the integration of students with learning disabilities, another component of inclusion should be the planning and programming of classroom activities and assignments to maximize advantages and learning opportunities for learning-disabled students. The true success of inclusion is dependent on many factors. During school hours, all responsible people, including instructors and administration staff, should take care of the pupils' educational, social, and individual needs. The schools should provide proper training, facilities, and support to teachers so that the genuine spirit of inclusion may be shown in the achievement of children with learning disabilities (Ahmed, 2012).

2.4 Principles of Inclusion

In 1994, the UNESCO Salamanca Statement and Framework for Action on Special Needs Education outlined the essential concepts that underpin IE. These are that every child has

- i. the privilege of schooling,
- ii. distinctive characteristics, abilities, interests, and learning needs,
- iii. the right to grow to their full potential and to be energetic,
- iv. appreciated residents in their community,
- v. academic institutions, must facilitate this diversity in the student population, and students with SEN must have full rights to the normal school system.

Furthermore, it contends that inclusive education provides practical learning and improves the overall efficiency of the education system (UNESCO, 1994).

2.5 Importance of Inclusive Education (IE)

Inclusive education prescribes that efforts should be made to create an inclusive learning environment where all children should have sufficient opportunities to interact and learn together rather than creating completely separate institutions for all children with disabilities. Inclusion is advantageous to children with different needs and all children, regardless of gender, race, personality traits, or parental economic situation. Experts have identified the benefits of inclusive education for mildly disabled children and society through research. By learning together, disabled children can form friendly relationships with other children, and their confidence level, learning outcomes improve as well (Government of Pakistan, 2017).

Rather than creating separate special education centres, it is less costly to convert the mainstream schools to inclusive ones by incorporating enabling infrastructure and teachers' training.

2.6 Need for Inclusive Education (IE)

International efforts have been undertaken to integrate children who are disabled into the educational mainstream. To achieve full IE, children with mild disabilities must be considered and included in regular classrooms. IE is a more practical approach for ensuring the success of all pupils. According to research, most children learn and perform better. An increasing body of evidence indicates that students academically perform well in inclusive environments, and Inclusion allows for forming relationships. Social connections, skills, personal beliefs, a sense of ease with people with special needs, and compassionate educational environments are just a few of the benefits. Students come into the classroom with diverse needs and unique

contributions, which IE values. In a truly inclusive atmosphere, every student feels comfortable and has a sensation of ownership. School workers are prepared, educated, adaptive, and well-prepared to educate, support, and react to the demands and needs of all children. Inclusive systems provide higher education for all learners while also assisting in the abolition of discriminatory mindsets (Niti & Singh, 2021).

In Pakistan, an inclusive education system is required because it benefits students from all social groups, not only those with disabilities but other children, by instilling tolerance, acceptance, and respect for variety. Inclusive education not only improves educational quality but also reduces disparities and unfairness. The concept of IE is completely consistent with the teachings of Islam and other religions, and it is a cost-efficient method of minimizing the dropout rate (Government of Pakistan, 2006).

2.7 Milestones in Disability-Inclusive Education

The government initiatives in the area of inclusive education can be traced back to;

- i. 2002: National policy for persons with disabilities was adopted. The policy outlines goals for empowering persons with disabilities by providing directives for them to have access to facilities leading to their full integration into society; participate in the planning and implementation of programs concerning them; enjoy their rights like other citizens; and have equal access to "medical, education, social, psychological, vocational training, employment and rehabilitation, without any discrimination.
- ii. 2005: Federal and all provincial governments signed the Declaration on Inclusive Education. The declaration provided a working definition of inclusive education (UNESCO, 2008).

- iii. **2006:** Adopted the Islamabad Declaration on accessibility for persons with disabilities.
- iv. **2008:** Signed the Convention on the Rights of persons with disabilities.
- v. **2011:** Ratified the Convention on the Rights of persons with disabilities.
- vi. **2013-2014:** Baluchistan, Punjab, and Sindh Provinces passed education laws supportive of Inclusive Education.
- vii. **2017:** i. Adopted National Education Policy.
 - ii. Approved the National Curriculum Framework.
- iii. Khyber Pakhtunkhwa adopted the Free Compulsory Primary and Secondary Education Act.
- viii. **2020:** Passed the ICT Rights of Persons with Disabilities. It maintains that general education settings must be 'equipped and reasonably staffed' to implement inclusive education (Grimes et al., 2021).

2.8 Disability

Disability is when someone faces challenges in their body or mind, which can be physical, mental, sensory, emotional, or a mix of these. These challenges can be there from birth or happen later in life. Disability is a broad term that includes impairments (problems in the body's function or structure), limitations in doing certain tasks, and difficulties in taking part in daily life situations. Disability is complex and depends on both a person's body and the society they live in (Grover, 2007).

2.8.1 Types of Disability

Disabilities come in different forms and can vary in how much they affect a person. Some disabilities are caused by genes or are inherited, some happen when a

mother has an infection or other issues during pregnancy, and others occur due to injuries or illnesses.

Disabilities can be grouped in various ways:

2.8.1.1 Vision Impairment

This means having trouble seeing to a significant degree, which may require extra support.

2.8.1.2 Hearing Impairment

Hearing plays a crucial role in academic learning. It interferes with the student's achievement. Therefore, it is desirable to take steps to meet their educational needs.

2.8.1.3 Physically Handicapped

This refers to someone with a physical problem that limits their ability to do regular activities. It could be a severe or mild issue, affecting body structure or function.

Physically handicapped children can be classified as:

- Deaf or hard of hearing (partially deaf)
- Partially blind or having low vision (partially blind)
- Language handicapped, which means having speech or communication difficulties (Grover, 2007).

2.8.1.4 Learning Disabilities and Other Disorders

Learning disabilities are different from disabilities like paralysis or blindness because they are not visible. These hidden challenges can affect a person's learning or skills like reading and math. Learning disabilities can impact various parts of life, including school, work, daily routines, family, friendships, and play. Some people may

have multiple overlapping learning disabilities, while others may have a single issue that doesn't affect other parts of their life (Grover, 2007).

Dyslexia

This difficulty makes it hard to learn to read, even with proper teaching, intelligence, and opportunities. The main signs are having trouble with reading accuracy, speed, comprehension, spelling, delayed spoken language, slow writing, remembering words, and finding the right words when speaking (Grover, 2007).

Dyscalculia

It involves problems understanding numbers, math operations, and estimation. While many students find math challenging for various reasons, dyscalculia is more persistent and can lead to math anxiety (Grover, 2007).

Dysgraphia

This learning disorder affects a person's ability to write. It can lead to difficulties with handwriting, spelling, and organizing thoughts on paper. People with dysgraphia may struggle with letter formation, spacing, and the overall legibility of their writing (Grover, 2007).

2.9 Essential Resources for Inclusive Education

While once seen as a way to boost academic achievement, and cut costs, full inclusion doesn't save money, decrease student requirements, or enhance academic results. In most situations, it simply relocates special education professionals from their classrooms to a corner of the regular classroom. To prevent any harm to the academic progress of students with disabilities, a comprehensive array of services and resources are necessary, including:

- 1. Satisfactory support and services tailored to each student's needs.
- Well-crafted individualized education plans (IEPs) and continuous
 professional development for all educators, encompassing both general and
 special education teachers.
- Adequate time for teachers to collaborate, plan, create instructional materials, and assess student progress collectively.
- 4. Smaller class sizes based on the severity of students' needs.
- 5. Enhancement of professional skills in areas like cooperative learning, peer tutoring, and adaptive curriculum.
- 6. Effective cooperation among parents or guardians, teachers, specialists, school administrators, and external agencies.
- 7. Sufficient funding to enable schools to design programs based on student needs rather than budget constraints (Ranjan, 2014).

2.10 Factors for Successful Inclusive Classrooms

Several factors play a crucial role in ensuring the success of inclusive classrooms. These include:

- 1. Strong collaboration between families and schools.
- 2. Effective teamwork between general and special education teachers.
- Well-structured plans that outline individualized accommodations, adjustments, and objectives for each student.
- Coordinated planning and communication between regular and special education staff.

- 5. Smooth delivery of support services.
- 8. Continuous training and professional development for staff members (Ranjan, 2014).

2.11 Awareness towards Inclusion

2.11.1 Educator Attitudes Towards the Implementation of Inclusive Education

One important aspect is how teachers feel about inclusive education. Nowadays, teachers have more diverse roles than before. They need to be aware of the different types of students in their classes and adjust their teaching accordingly. This means they should not only think about physical changes but also change their attitudes and make sure every student can access education equally (Ranjan, 2014).

Some teachers find this challenge exciting and see it as a positive change in their careers. They believe it's enjoyable and helpful. However, for others, it can be very stressful. Some teachers find it so difficult that they see it as an impossible task.

But for many, being an inclusive educator is a chance to grow personally and professionally while making a positive impact on education. Teachers have different feelings and attitudes toward including students with disabilities in regular classes. Positive attitudes can make inclusion work well, while negative attitudes can lead to problems for these students in regular classrooms (Ranjan, 2014).

2.11.2 Teacher Concerns About Inclusive Education

Many teachers express positive views about inclusive education, especially those who have experienced its benefits firsthand. However, the idea of catering to the diverse needs of all students in one classroom can be daunting and comes with controversies. Teachers commonly have concerns in four main areas regarding

inclusive education: teacher training, appropriate curriculum, available resources, and school/classroom structures that may hinder inclusion (Loreman et al., 2010).

• Teacher Training

Teachers often worry about their readiness to address the varying learning needs in inclusive classrooms. Many feel they lack the necessary skills and knowledge to effectively include students with diverse learning needs. It's believed that being a competent teacher in an inclusive setting requires specific skills, knowledge, and qualities. Some may think these skills are significantly different from those taught in regular teacher preparation programs, although some argue they are essential for effective teaching in any context. Inclusive teaching relies on sound pedagogy that benefits all students and a willingness to adapt and learn new techniques when needed. Teacher training for inclusion can occur during initial teacher preparation and through ongoing professional development (Loreman et al., 2010).

Barber & Turner (2007) found that new teachers who participated in the induction program felt more confident & skilled in working with students with diverse needs. Professional learning opportunities can make a big difference.

Curriculum

Providing a suitable curriculum for all students in inclusive settings is crucial for successful inclusion. While individualized education plans have been accepted as tools to aid students with diverse needs, there is ongoing debate about their efficacy and morality. Individualized education supporters argue that such plans can effectively target and meet a student's specific educational goals. However, teachers are generally expected to provide instruction aligned with the regular curriculum while accommodating students' unique needs. This practice can be viewed as exclusionary,

assuming that students with diverse needs learn differently and require modifications. Such modifications often stem from negative assumptions about these students, such as slower learning rates or the need for additional practice and repetition (Loreman et al., 2010).

School Resources

Recognizing the need for additional funds to support students with unique needs is essential. Inclusion programs can be costly, but cost-effective strategies can be implemented. These include using support staff, evaluating spending, tapping into funding from existing special programs, and implementing site-based decision-making. Extra funding helps provide more comprehensive instruction but does not guarantee successful inclusion. It's essential to consider staff attitudes and school organization as they also impact inclusion. While financial resources are important, they alone are insufficient for successful inclusion. Strategies that don't require substantial additional funds can be effective (Loreman et al., 2010).

• Organizational Structures

Many schools and classrooms are organized in ways that may not support effective learning for various students. This is particularly evident in secondary schools. Teachers often face inflexible timetables that limit the time available for effective teaching, especially for students who need more time to complete tasks or transition between activities. Inadequate time and pressure to cover a prescribed curriculum can constrain teachers. To become more inclusive, schools and school systems need to reevaluate their organizational structures. Structural changes aimed at fostering inclusion can benefit all students, not just those with different needs.

Addressing teacher concerns in areas like training, curriculum, resources, and organizational structures is essential for successful inclusive education. This approach ensures that all students have access to quality education and support, regardless of their diverse learning needs (Loreman et al., 2010).

2.12 Pedagogy

Pedagogy is the science and art of teaching, combining creative processes with firm principles. It informs the structure and practical activities of education. Inclusive pedagogy aims to provide equal opportunities for all learners, recognizing their individual needs and rights to education. While there is a common pedagogy, learners with social or developmental difficulties may require specific policies and practices to ensure their learning rights are fulfilled. Policies should establish optimal conditions for successful teaching and learning (Brown, 2016).

Pedagogy is often about how teachers teach a curriculum, while inclusive pedagogy focuses on adapting teaching strategies to different contexts and learning styles. It values individual differences, and cultural diversity, and promotes inclusive values in the classroom and school. Social constructivism is a useful framework for inclusive pedagogy, emphasizing the learner as an active meaning-maker. Learning is seen as a self-initiated interaction with the world (Richards & Armstrong, 2016).

2.12.1 Inclusive pedagogy & learning theory

Social constructivism emphasizes the importance of interaction and collaboration in learning. Social constructivism provides a theoretical framework that differs from traditional transmission models of teaching. Instead of a one-way transmission of knowledge, it recognizes that learners actively construct their understanding through social interactions and engagement with their environment. By

embracing this approach, inclusive pedagogy can create an environment that values diverse perspectives and fosters dialogue and shared learning experiences. It's a powerful framework for promoting inclusivity in education (Richards & Armstrong, 2016).

Inclusive pedagogy encompasses collaborative co-construction of learning among peers, creating vibrant learning communities in the classroom. Teachers should be open to collaboration, drawing on shared knowledge and experiences to develop inclusive teaching and learning practices. It's crucial to value and listen to the voices of learners themselves, as their perspectives are essential in understanding their learning experiences. By embracing inclusive approaches, we recognize that learners bring their unique histories and socially constructed knowledge to the learning process. This knowledge has the power to transform and expand on what is being taught (Brown, 2016).

Learning becomes a collaborative process where teachers consider prior learning, preferred learning styles, and social contexts. Collaborative exploration in the classroom, where students share knowledge to solve problems and hypothesize, serves as scaffolding. Pedagogy and curriculum are intertwined, as teaching approaches reflect what is recognized and valued as knowledge. Inclusive pedagogy acknowledges the uniqueness of every student and the influence of social and cultural factors on responses to curriculum and teaching (Richards & Armstrong, 2016).

2.13 Approaches to Teaching for Diversity at the Secondary level

Secondary teachers have a responsibility to ensure they reach all students effectively in their classrooms. To achieve this, they can use various teaching strategies that are well-suited to the secondary school environment.

2.13.1 Universal Design for Learning

The main idea behind teaching strategies for diverse needs is based on the principles of Universal Design for Learning (UDL). Instead of adjusting teaching methods and materials later on, UDL involves incorporating support and accommodations directly into the original teaching plan. It's like designing buildings with ramps to provide access for everyone, whether they use wheelchairs or delivery trolleys. In the classroom, teachers can improve their instruction for all students by including universally designed techniques in their lesson plans. For example, they can start each lesson with a clear graphic organizer showing the main points of the content. Additionally, providing guided notes with these key points spaced out helps all students follow along with the lesson (King-Sears, 2017).

2.13.2 Explicit Teaching and Direct Instruction (EDI)

Explicit Teaching and Direct Instruction (EDI) are very similar approaches that involve teacher behaviours and curricular materials. They are applied through a sequence of guided activities to teach specific knowledge, skills, and practices. Major topics are broken down into smaller steps and taught by the teacher through explaining, demonstrating guided practice, and independent practice. This approach helps students build confidence and ultimately complete the entire skill or task. Teachers should ensure that activities align with lesson goals and allow all students to participate successfully (King-Sears, 2017).

2.13.3 Cooperative Learning

Cooperative learning in secondary schools emphasizes social processes and has advantages for diverse students. In groups, students work together to achieve group goals while also achieving their individual learning and social goals. They practice

social skills like turn-taking, cooperative skills like helping and encouraging, and leadership skills like providing direction. Students are accountable for their learning and their contribution to the group. Peer tutoring, jigsaw, and student teaming are commonly used strategies (King-Sears, 2017).

2.13.4 Information and Communication Technologies

Information and communication technologies in the classroom have distinct advantages for engaging students with diverse needs. Interactive software packages with graphics and animations can enhance information representation and challenge learners across multiple literacies. Assistive technologies provide tools for students with specific disabilities to be independent in mainstream classes. Age-appropriate programs for secondary settings are available, but teachers should consider how they align with learning goals (Foreman, 2011).

2.14 Collaborative Teaching and Teaming in Secondary Schools

It involves working together, cooperating, and sharing goals, problem-solving, and achievements. Teachers need to collaborate more with professionals and parents due to increased demands and student diversity. Collaboration with stakeholders needs to be applied with the following characteristics in mind;

- Collaboration should be based on equal input, mutual goals, shared decisionmaking, and accountability.
- Collaborators should share resources and expertise, value the process, trust and respect each other, and build a sense of community.
- Collaboration can take different forms collaborative teams, consultation, coteaching, and working with parents (Friend & Cook, 2007).

2.14.1 Collaborative teams

Collaborative planning plays a crucial role in enhancing the learning and teaching experience. It involves a collective effort where each team member supports one another in developing suitable instructional plans and creating tailored learning activities for students with additional needs. The primary goal is to actively engage these students in the classroom learning environment (O'Rourke and Houghton, 2009).

In secondary schools, there are teams of professionals who work together to support inclusion programs, individual education plans (IEPs), and behaviour management. These teams might include regular teachers, special educators, learning support teachers, guidance counsellors, or teacher's aides. They collaborate to address issues like a student's specific learning needs or classroom management. This collaboration helps in understanding what's happening and finding solutions (Foreman, 2011).

Learning support teachers, visiting teachers, and guidance counsellors can offer advice and coordinate services both within the school and in the community. However, the primary responsibility for teaching still lies with the classroom teacher.

When it comes to collaborative teaching, many regular teachers rely on teacher's aides to assist students with additional needs in their classrooms. While some teacher's aides have experience with such students, they typically don't have the same training as teachers. Therefore, classroom teachers need to provide clear instructions to teacher's aides regarding their roles, and preferred teaching methods, and give them feedback on their interactions with students. Teacher's aides should also have the flexibility to work with various students, not just one, to support the teacher effectively (Foreman, 2011).

Collaboration, in this context, is more about how teachers work together rather than what specific tasks they perform. It's an intangible process that relies on the interaction styles and teamwork of professionals to achieve common goals. Successful collaboration is a long-term endeavour that builds upon a shared understanding of both student and teacher needs. To implement collaborative planning effectively, schools need strong support from their leadership to develop team interaction skills and allocate time for the implementation of these skills in catering to specific student requirements (O'Rourke and Houghton, 2009).

Deppeler et al. (2005) argue that principals should be trained to facilitate school improvement through collaboration, emphasizing its importance in creating supportive learning communities within schools.

Interestingly, the processes and procedures for students who are both gifted and have learning difficulties in regular classrooms are similar to those for all students with additional needs. Additionally, there are adaptable pro forma that can be used for students with varying levels of additional needs. The discussions mentioned earlier, especially when addressing students with high support needs like Stephanie, underscore the significance of collaborative planning and execution.

In a co-planning approach to teaching in secondary schools in Western Australia, three key considerations were identified;

- 1. The focus should be on providing support for mixed-ability teaching.
- 2. Adequate training is necessary to develop skills that align with both the curriculum and the mixed-ability classroom's needs.
- 3. The establishment of suitable structures and allocation of resources is essential for mixed-ability classrooms to thrive (O'Rourke and Houghton, 2009).

2.14.2 Co-teaching

Co-teaching is becoming more common in secondary education as an inclusive teaching method. It's also known as collaborative or team teaching. In co-teaching, regular and special education teachers work together to provide instruction to a diverse group of students in the same classroom. This approach has many benefits for both students and teachers (Foreman, 2016).

In a co-teaching environment, regular and special educators collaborate and share their expertise. Regular teachers can learn more about adapting instruction, while special educators can improve their skills in teaching standard curriculum content. This model is gaining recognition in both primary and secondary schools.

In inclusive classrooms, a common form of co-teaching observed is "one teach, one assist." In this approach, the class teacher takes the lead in teaching the entire class, while the support or special education teacher assists students with diverse needs. However, it's important to note that this model is not highly recommended in co-teaching literature (Foreman, 2016).

The preferred co-teaching models, although not frequently used, offer more collaborative and effective strategies. These models include:

- Parallel teaching: Both teachers jointly teach the same or similar content to different groups of students.
- **Station teaching:** The two teachers work together to support group learning activities throughout the classroom.
- Alternate teaching: One teacher provides intensive or individual instruction to a small group of students for a brief period during the class.

• **Team teaching:** Both teachers share equal responsibility for leading instruction.

To enhance collaboration and move towards more effective co-teaching, a shift in the teacher relationship dynamics is necessary. This change should be led by school principals and senior staff members (Foreman, 2016).

However, there are some concerns about co-teaching at the secondary level. These include:

- Teachers may not fully understand the different aspects of co-teaching, with the classroom teacher focusing on curriculum expertise and the special education teacher on special education methods.
- 2. Students may lack fundamental academic and social skills, which can require remedial work not always aligned with the secondary-level curriculum.
- 3. There's often insufficient planning time for special educators to discuss students' needs and IEPs and for regular educators to plan content and instruction collaboratively (Dieker & Murawski, 2003).

To address these challenges, teachers can:

- 4. Seek professional development opportunities where regular and special teachers can review co-teaching models and plan together.
- Carefully choose co-teaching partners and create common planning periods to collaborate effectively.
- 6. Schedule students into co-taught classrooms early in the scheduling process.
- 7. Explore various instructional practices together.
- 8. Use block scheduling to have extended time for different teaching techniques.

- 9. Adapt co-teaching methods to meet students' diverse needs and consider alternative assessment methods.
- 10. Expect some initial challenges in the working relationship and address any issues that arise.
- 11. Foster increased communication among subject teachers regarding adaptive strategies with special educators (Dieker & Murawski, 2003).

2.15 Pilot Projects on Inclusive Education

2.15.1 Engage Pilot Project

The ENGAGE project was implemented by AIR and was funded by USAID. ENGAGE project aimed to include disabled individuals and disabled people organizations' needs in development planning and execution.

This project in Pakistan worked to increase access, engagement, and involvement in excellent learning settings/environments for disabled children. The project employed two techniques to execute the project in Pakistan:

- 1. In teacher training programs inducing curricula related to disability and IE.
- 2. Developing a pilot project on IE.

ENGAGE chose an existing teacher training initiative, RISE by USAID, to highlight the benefits of incorporating disability into mainstream development efforts. ENGAGE provided a professional who developed an IE curriculum and tools for RISE to train seven thousand primary educators. As a result, teaching staff became more conscious of constructing inclusive classrooms with diverse learners' needs.

After the first group of Bagh District teachers finished RISE's 2-year program, ENGAGE launched an inclusive education pilot project. The project's goal was to give additional training and assistance to 25 instructors so that they could educate children

with impairments in their classes. The pilot project selected trainee instructors having 48 disabled students in their school rooms. These individuals had various problems, including visual and hearing loss and physical, intellectual, and emotional/behavioural issues. There were 1,373 students without disabilities in the classes of the trainee instructors. The trainee instructors came from 19 different schools.

To provide training and support, the pilot project used three approaches: workshops, on-site support with tutor instructors, and group meetings, in which a group of instructors gathered with IE professionals to answer issues and discuss answers or techniques to handle challenges. After the project, instructors' attitudes, knowledge, and abilities changed. Overall, training instructors gained confidence in their skills to educate disabled students. Educators were more aware of the requirements of disabled children as well as how aspects such as seating arrangements may improve learning, which resulted in changes in the classroom atmosphere and layout. Teachers also employed more participatory and student-centred teaching tactics (Caceres et al., 2010).

2.15.2 Pilot Project on Integrated Education of Children with Disabilities

In collaboration with Sight Saving International, the Ministry of Social Welfare, Special Education Department (SED), Federal Directorate of Education (FDE), and Ministry of Education, initiated a pilot project on inclusive education. The pilot project was initially deployed in 16 mainstream schools (boys and girls). These pilot schools were to promote the establishment of awareness and re-orientation and to give inclusive education training to the principals and instructors of these schools. Workshops and seminars for consultation were planned. Its essential aim was to integrate learners with disabilities through an IE system, with a benefit target of twenty to twenty-five pupils in school per year. Other objectives included creating awareness, educating the local community, and providing facilities to children with disabilities (UNESCO, 2008).

The Pilot Project boosted stakeholder awareness and motivation. Furthermore, the number of disabled children's participation and enrollment has increased. The pilot project improved and enhanced students' moral sense, social interaction, confidence, and performance level (Abbasi, 2012).

Based on the experiences gained by these pilot projects, we can realize the encouraging signs that IE is possible in Pakistan if proper support and resources are provided. Moreover, these projects showed that when the Pakistani teachers or tutors were provided with the training, they then started accepting the diversity in their students and their differences, and the teachers were able to make changes in their teaching method/ pedagogy, which are the essential beginning steps to make schools and classes inclusive one.

2.16 Challenges and Prospects of Inclusive Education

Providing equal educational opportunities is a global problem that every country faces, whether developed or under development. Inclusive education is a cornerstone of educational policy and has become a global requirement. As a developing country, Pakistan must tackle this effort because of budget restrictions, uncertain societal behaviour toward education, particularly among girls, and the country's poor state of education (Thakur & Abbas, 2017).

The Pacific region's obstacles and challenges to inclusive education included a need for teacher capacity, insufficient resources, and unfavourable attitudes (Sharma, et al., 2019).

In Pakistan, challenges, and Prospects of inclusive education include

- 1. Infrastructure
- 2. Execution of policies
- 3. Trained and skilful teachers,

- 4. Appropriate assessment techniques and practices,
- 5. Curricula and
- 6. Need more financial resources.

Moreover, Pakistan needs a defined strategy, clear policy, and road plan for promoting inclusive education (Government of Pakistan, 2017).

According to Bhat (2018), the challenges of Inclusive education include the following;

- 1. Lack of assistive tools and devices
- 2. Social attitude towards disability
- 3. Inadequate pre-service training and professional development
- 4. Expense or funding is another challenge to the practice of Inclusion.
- 5. Lack of coordination and communication among administrators, teachers, staff, and other concerned authorities.

Inclusive education is about ensuring that all students, including those with disabilities, are included and valued in mainstream schools. It promotes equal participation and opposes exclusion. It advocates for a culture and curriculum that doesn't label students and instead embraces their diversity. The focus is on reducing challenges and providing support to make education accessible for all. Inclusion sees diversity as a strength, not a hindrance. It emphasizes capacity building for schools, staff, and students. Schools play a vital role in shaping a new educational culture that values and supports every student (Tariq, 2016).

Inclusive education calls for schools to change their culture and enhance their methods. Inclusive education isn't just about special teachers meeting the needs of special children in regular schools. It's about understanding how, why, and where we

can educate all students and the impact it can have. It's about creating an inclusive environment for everyone to learn and thrive.

2.16.1 Environmental Challenges

Students face a lot of environmental barriers in schools. There are several environmental challenges that students are facing in their school. These include issues with doors passageways, elevators, washrooms, stairs, ramps, lockers and recreational areas. Physically getting into school and navigating passageways & pathways seem to be major concerns. In one of the studies, students also mentioned challenges with crowded hallways and narrow spaces within classrooms & libraries which make it difficult for students to navigate. (Fareo, 2020).

A major challenge in implementing inclusive education in Pakistan is the widespread attitudinal barriers. Societal stigma and discrimination against individuals with disabilities hinder the progress of inclusive education (Faizefu & Busi Ernest, 2024).

2.16.2 Intentional Attitudinal Challenges

The students in the focus groups are experiencing intentional attitudinal barriers. Isolation, physical bullying, and emotional bullying can have a significant impact on their well-being. Being ignored or struggling to form friendships can be incredibly isolating. Physical bullying, like having their wheelchair pushed without permission or being purposely knocked out of it, is completely unacceptable. Emotional bullying, such as name-calling, mocking, and being treated differently, is deeply hurtful. (Tariq, 2016).

2.16.3 Unintentional Attitudinal Challenges

Unintentional attitudinal barriers arise from a lack of knowledge, understanding, or effort within the educational system or staff. Unfortunately, many studies have found a frequent barrier to be the lack of understanding by teachers and support staff. This can manifest in various ways, such as giving inappropriate substitute work instead of adapting the curriculum, assigning students as teacher's helpers in physical education classes instead of providing equal opportunities, or excluding children with special needs from certain classes without valid reasons. Educators need to be more aware and informed to ensure an inclusive learning environment for all students (Tariq, 2016).

2.16.4 Physical Challenges

These students also face physical challenges related to their condition or disability. For instance, many of them require personal assistants or teaching assistants for tasks like getting dressed, personal care, or additional educational support. Another significant barrier they mentioned is the need for extra time to navigate the school, have lunch, or complete their schoolwork. These physical requirements are important for school staff to understand, along with information about their disability or condition (Tariq, 2016).

2.17 Essential Tips for the Inclusive Secondary Classroom

By implementing these strategies, you can create an inclusive classroom that caters to the diverse needs of your students.

1. **Utilize Visual Aids**: To help learners with learning, attention, or memory difficulties work independently, consider creating short video clips that

- demonstrate the target skills. These clips can be replayed during the lesson, reducing the need for constant assistance.
- 2. **Consider Seating for Visual Impairments**: Ensure that visually impaired students have appropriate seating arrangements that allow them to see both you and the board. Don't assume they will always communicate their visual challenges (Whittaker & Hayes, 2018).
- 3. **Use Written and Pictorial Instructions**: Instead of relying solely on verbal instructions, provide written and pictorial instructions. This benefits all learners and is particularly helpful for those with memory difficulties.
- 4. Consider Dyslexic Learners: Approximately 20% of dyslexic learners find it easier to read from pastel-coloured paper or with coloured overlays, which reduces visual glare. Discover their preferred colours and consistently provide them.
- 5. **Effective Communication for Hearing Impairments**: When communicating with learners with hearing loss, always face them directly to facilitate lipreading, even if they use hearing aids. Speak clearly and naturally without exaggerating sounds.
- 6. **Tailor Reading Strategies**: Recognize that students have varying reading abilities. Tailor strategies to their needs, such as pre-teaching keywords and using visuals for those with poor comprehension (Whittaker & Hayes, 2018).
- 7. Accessible Printed Resources: Ensure that printed resources are clear and well-laid out for students with visual impairments. Consider using uncluttered text, clear fonts like Comic Sans or Arial, and possible enlargements as needed (Whittaker & Hayes, 2018).

- 8. **Support for Dyscalculia**: Break down mathematical processes into small steps for learners with dyscalculia. Encourage a graduated approach, showing all steps, and adjust the number of problems to reduce anxiety.
- Minimize Background Noise: For learners with hearing aids, minimize background noise to enhance focus.
- 10. **Consider Seating Placement**: If students have physical disabilities or visual impairments, seat them where they can easily see learning resources and displays. Ensure they have equal access to information (Whittaker & Hayes, 2018).
- 11. **Use Respectful Language**: Be mindful of the language you use when referring to students with learning difficulties and disabilities. Avoid derogatory terms and challenge their use by others when necessary.
- 12. **Teach Concept Mapping**: Introduce learners to concept mapping as an effective way to understand complex information and visualize connections between topics.
- 13. **Prioritize Hearing-Impaired Learners in Seating Plans**: When creating seating plans, consider the needs of hearing-impaired students. They may require seating near the teacher or facing the class for optimal communication.
- 14. **Utilize Practical Learning Materials**: Explore departmental resources like games, costumes, models, and artefacts to enhance lessons. These concrete materials can make learning more engaging and memorable (Whittaker & Hayes, 2018).

2.18 Common Practices

In inclusive classrooms, students are typically placed with peers of the same age, regardless of whether they are working above or below the typical academic level for their age. Emphasis is placed on fostering friendships to promote a sense of belonging. Teachers often facilitate connections between students with special needs and their same-age peers without special educational needs.

Another common practice is the assignment of a buddy who accompanies a student with special needs throughout various activities, including the cafeteria, playground, and bus rides. This helps students understand that a diverse community includes various types of individuals and eliminates barriers to forming friendships. These practices aim to reduce the likelihood of exclusiveness among students in later grades and encourage cooperation among different groups (Ranjan, 2014).

Teachers employ several techniques to build classroom communities, such as:

- 1. Organizing games that promote teamwork and problem-solving.
- 2. Sharing songs and books that teach the importance of community.
- 3. Addressing individual differences through open discussions.
- 4. Assigning classroom responsibilities that contribute to building a sense of community.
- 5. Teaching students to look out for ways to support one another.
- Incorporating equipment like standing frames to enable students who
 typically use wheelchairs to stand and participate more actively in activities.
- 7. Encouraging students to take on the role of the teacher, such as reading a portion of a book to a peer with minor disabilities.

8. Focusing on and highlighting the strengths of students with special needs.

These strategies help create inclusive classroom environments that promote collaboration, understanding, and a sense of community among all students (Whittaker & Hayes, 2018).

• Best Practice

Since STEP's establishment in 1997 by individuals with disabilities, the Special Talent Exchange Program (STEP) has significantly advanced inclusive education in Pakistan. STEP is dedicated to empowering individuals with disabilities and raising awareness among the wider community. One of STEP's notable initiatives is the Girls with Disabilities in Mainstream Schools Project, which has successfully enrolled many girls with disabilities, including those with physical, intellectual, and visual impairments, in schools in Nowshera and Charsadda. To prepare these schools, STEP provided training on the inclusive education model to hundreds of teachers, school administrators, and community members. This training not only benefited the girls by facilitating their education but also gave teachers new perspectives on their roles and the impact they can have on their students (Muhammad, Bokhari & Anis, 2024).

2.19 Empirical Research

A study conducted by Singh (2016) found that IE enables learners to be involved and participate equally in all aspects of the classroom. Parents, educators, and community leaders' involvement and cooperation are required to create better and more inclusive schools. Through cooperation and collaboration, challenges can be met. Moreover, the study reveals that raising awareness and publicizing positive examples of succeeding disabled children in IE and life, as a result, can help in choking the challenges.

Thakur & Abbas (2017) conducted another study that reveals that the Punjab government has taken many initiatives, but the challenges badly hinder its practical implementation. Moreover, the Government of Punjab faced many challenges with the implantation of Inclusive education like; resource constraints, deficiency of policy initiatives at an administrative level, and lack of negligence and teacher training. The biggest challenge for IE in Pakistan is its ownership.

A study conducted by Bugti & Kazimi (2021) found that in implementing IE, school heads faced many challenges, such as the non-availability of the teaching staff, learning equipment, and materials according to the students with special needs. Furthermore, teachers need more training as they are ready and willing to teach and use different methods to meet diverse students' needs.

A study conducted by Kurowski et al., (2022) found the broad support for inclusion in legislation and among teachers but highlights significant barriers to its effective implementation. These barriers include systemic inconsistencies between law and practice, the unpreparedness of educators, the need for collaboration among various specialists, and a lack of comprehensive research to inform strategic frameworks. These findings emphasize the complexity of achieving genuine inclusion in primary school settings.

Mag et al., 2017 conducted a study which highlighted, that teaching quality significantly impacts student learning, making teacher excellence crucial for inclusive education. The study found strengths such as the inclusion of children with mild to moderate disabilities, effective intervention teams and strategies, family and community partnerships, and teacher development. Challenges include policy discontinuities, lack of special education support, high student-teacher ratios, assessment disparities, and limited resources. Barriers include stereotypes, financial crises, and inadequate infrastructure and resources.

2.20 Critical Summary

IE gathers all children into one classroom and society. It includes the previously excluded group no matter what caste, colour, gender & disability they have. It is about all students learning together even if their speed and learning styles differ. Inclusive education is to respond positively to the various needs of all persons in the learning process through their involvement in communities, cultures, and learning activities, as well as to stop the exclusion of some groups from education. Moreover, this process comprises changes in content, tactics and approaches intended to include all children in the educational process with the notion that states are responsible for providing education to all children.

Experts have identified the benefits of IE for disabled children and society through research. By learning together, disabled children can form friendly relationships with other children and they become more confident. IE provides practical learning and improves the overall efficacy of the education system.

In Pakistan, an inclusive education system is required because it benefits students from all social groups, not only those with disabilities but other children as well by instilling tolerance, acceptance, and respect for variety. The government of Pakistan made efforts to implement inclusive education for that purpose and launched a pilot project to provide inclusive education. Based on experiences gained by pilot projects, we can realize the encouraging signs that IE is possible if proper support and resources are provided. More or less all these efforts brought forward some challenges.

Different researches highlight different prospects and challenges. Some researches state challenges of IE which include; inappropriate infrastructure, trained teachers, lack of assistive tools, expense and execution of policies. Environmental, physical, intentional and unintentional challenges of inclusive education are also

hindering the successful implementation of inclusive education. Addressing teacher concerns in areas like training, curriculum, resources, and organizational structures is essential for successful inclusive education. This approach ensures that all students have access to quality education and support, regardless of their diverse learning needs.

Pedagogy is often about how teachers teach a curriculum, while inclusive pedagogy focuses on adapting teaching strategies to different contexts and learning styles. It values individual differences, and cultural diversity, and promotes inclusive values in the classroom and school. Inclusive pedagogy encompasses collaborative co-construction of learning among peers, creating vibrant learning communities in the classroom. Teachers should be open to collaboration, drawing on shared knowledge and experiences to develop inclusive teaching and learning practices.

Secondary teachers have a responsibility to ensure they reach all students effectively in their classrooms. To achieve this, they can use various teaching strategies that are well-suited to the secondary school environment. These strategies can be universal designs for learning, explicit teaching & direct learning, cooperative learning and information & communication technologies.

Collaborative teaching and teaming in secondary schools involves working together, cooperating, and sharing goals, problem-solving, and achievements. Teachers need to collaborate more with professionals and parents due to increased demands and student diversity. Co-teaching is becoming more common in secondary education as an inclusive teaching method. In co-teaching, regular and special education teachers work together to provide instruction to a diverse group of students in the same classroom.

A teacher can use different strategies, and can create an inclusive classroom that caters to the diverse needs of their students i.e., utilization of visual aids, use of written and pictorial instructions, accessible printed material & utilization of practical learning

materials etc. These strategies help create inclusive classroom environments that promote collaboration, understanding, and a sense of community among all students.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter highlights the methodology for collecting and analyzing the data.

This chapter will highlight the research design, research paradigm, instrument development, population, and a sample of the proposed study.

3.1 Research Paradigm/Research Design

Mixed method research (Quantitative and Qualitative methods) was used to conduct this study. Using a mixed method approach combines the strengths of both qualitative and quantitative research methods. This allows researchers to use different methods to study the same topic, leading to more reliable results. In this study, a mixed method was chosen to ensure that the research questions were thoroughly explored from different angles. It helps to increase the credibility of the findings by using various ways to gather and analyze data. The research design was a convergent mixed-method design. The research paradigm was post-positivism.

3.2 Population and Sample

The population of the study was secondary-level school teachers and principals in Islamabad. The researcher personally visited the Federal Directorate of Education to collect information on the population (2022).

Table 3.1Population of the study

	No. of Principals	No. of Teachers
Schools	19	466

The study sample was 19 school principals in Islamabad and 210 teachers according to Gay's (2005) population table from the targeted population. A universal sampling technique was used for principals. A simple random sampling technique was used to select the teachers. Moreover, the number generator method was used to draw a sample of the teachers.

Table 3.2Sample of the study

	No. of Principals	No. of Teachers
Schools	19	210

3.3 Instruments

A self-developed questionnaire on a five-point Likert scale, consisting of 49 items was used for this proposed study. The other one was a semi-structured interview consisting of six questions. A questionnaire was used to explore the prospects and challenges of inclusive education by taking the perception of 210 secondary school teachers and an interview was used to explore challenges, and status and to find out the possible solutions for the successful implementation of inclusive education from 19 school principals. Indicators of the quantitative tool include prospects, academic benefit (6), social benefits (5), equality of education (4), acceptance of diversity (4), self-esteem of students (4), challenges, facilities (7), suitable curriculum (4), trained teachers (5), knowledge & awareness (5) and cooperation (5). Qualitative tool parameters were teaching methods and strategies, current status, adjustment for schools' infrastructure, teaching-learning resources, teachers training and lastly the possible solutions for the successful implementation of inclusive education.

3.4 Procedure (Validity, Pilot Testing & Reliability)

3.4.1 Validity

The research tools were constructed by keeping the objectives and literature review in mind. To ensure the validity of the tool, the questionnaire was circulated among 7 teachers to be checked comprehensively. The experts for the validation of the instruments were chosen from the International Islamic University Islamabad. After validation of the instruments, the suggestions given by experts were incorporated and refined in the light of their recommendations.

3.4.2 Pilot Test

The pilot test was conducted to check the clarity of words and understanding of the respondents about the statements. The pilot test was conducted on 10% of the sample (2 principals and 41 school teachers) from the targeted population to ensure the instruments were appropriate. Participants selected for the pilot study were not included in the final collection of data. The researcher personally visited the schools. After conducting the pilot test, the statements were modified based on the feedback and suggestions provided by the participants.

3.4.3 Reliability

To check the reliability of the teachers' instrument, data gathered from the pilot test was analyzed through SPSS by applying Cronbach Alpha.

Table 3.3Reliability analysis of teacher's instrument

Variable	No. of items	Cronbach Alpha Value
Inclusive Education	49	.816

Table 3.3 shows the reliability value of the teacher's instrument was .816, which indicates that all statements of the questionnaire were reliable.

Table 3.4

Indicator-wise reliability analysis of Instrument

Indicators	No. of items	Cronbach Alpha Value
Prospects	23	.927
Challenges	26	.827

Table 3.4 shows the reliability values of indicators, which indicates that all statements of these indicators were reliable.

Table 3.5

Sub-Indicator Reliability of Instrument

Sub indicators	No. of items	Cronbach Alpha Value
Academic benefit	6	.784
Equality in education	4	.634
Social benefit	5	.858
Acceptance of diversity	4	.778
Self-esteem	4	.832
Facilities and Accessibility	7	.785
Trained teachers	5	.860
Cooperation	5	.793
Knowledge & Awareness	5	.699
Curriculum	4	.873

Table 3.5 shows the reliability values of sub-indicators of the instrument, which indicates that all statements of these sub-indicators were reliable.

3.5 Data Collection

A questionnaire was distributed personally by the researcher for data collection. Data were collected through personal visits of the researcher. The interview was taken personally by the researcher, by visiting principals' offices. Interviews were recorded on the electronic device. The participants were briefly instructed about the purpose of the study.

3.6 Data Analysis

Data obtained from teachers were analyzed through descriptive statistics (mean score) and data obtained through interviews with school principals were analyzed in the form of thematic analysis.

Table 3.6Details of Descriptive and Thematic Analysis

Sr#	Objectives	Research Questions Analysis
		Techniques
1.	To examine the current status of	What is the current status Thematic
	inclusive education.	of inclusive education? Analysis
2.	To explore the prospects of	What is the current status Mean
	inclusive education at the	of inclusive education?
	secondary level in Islamabad.	
3.	To explore the challenges faced in	What sort of challenges Mean &
	implementing inclusive education	schools are facing in Thematic
	in schools.	implementing inclusive Analysis
		education?
4.	To find out possible	How challenges of Thematic
	recommendations & suggestions	inclusive education can be Analysis
	for the successful implementation	overcome and inclusive
	of inclusive education.	education be implemented
		successfully?

3.7 Ethical Consideration

Ethics were considered during the research. Participant's consent was taken before proceeding with the research process. Data were kept confidential. The purpose of the research was explained with honesty and limpidity to the participants.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

This chapter covers in-depth details about data analysis and interpretation. Self-developed questionnaire was used for this proposed study. The first questionnaire consisted of a five-point Likert scale, consisting of 49 items and the other one was a semi-structured interview consisting of six questions. The questionnaire was used to explore the prospects and challenges of inclusive education by taking the perceptions of secondary school teachers and a semi-structured interview was used to explore challenges and to find out the possible recommendations for the successful implementation of inclusive education from school principals. A questionnaire was distributed personally by the researcher for data collection. Data were collected through personal visits of the researcher. The interview was taken personally by the researcher, by visiting principals' offices. Interviews were recorded on the mobile phone. The participants were briefly instructed about the purpose of the study. Data obtained from teachers was analyzed through descriptive statistics (mean) and data obtained through interviews with school principals was analyzed in the form of thematic analysis.

4.1 Analysis of Quantitative Data (Teacher's Questionnaire)

Part I: Prospects

Table 4.1Academic benefit

Items	N	Mean
Students benefit academically from being placed	210	4.29
in inclusive settings.		
Disabled students benefit academically from	210	3.99
being placed in inclusive settings.		
Students with mild disabilities learn better with	210	4.35
their peers in inclusive classes.		
The inclusion of students with minor disabilities	210	3.98
in the mainstream classroom is beneficial to		
other students		
Secondary-level children with varying abilities	210	4.36
are often better motivated when they learn in an		
inclusive setting.		
Students learn new skills through imitation that	210	4.41
equips them to live in their communities.		

Table 4.1 depicts the perception of teachers regarding the academic benefits of inclusive education perceived by secondary school teachers. The highest mean score of 4.41 indicates majority of the teachers agreed that students acquire practical life skills

that teachers agreed that students with mild disabilities learn better alongside their peers in inclusive classes. This positive view extends to the belief that secondary-level children with varying abilities are often better motivated in inclusive settings, as indicated by a mean score of 4.36. Moreover, there is a notable agreement that all students, regardless of their abilities, benefit academically from inclusive education with a mean score of 4.29. However, it's worth noting that while still positive, there is a slightly lower mean score of 3.99 for the belief that disabled students benefit academically from inclusion and a similar score of 3.98 for the perceived benefit of inclusion to other non-disabled students.

Table 4.2 *Equality in Education*

Items	N	Mean
Disabled students perform equally with other	210	3.80
students in an inclusive environment.		
The best way to ensure equality in education is	210	4.29
to make all students learn in inclusive classes.		
Inclusive education allows all students equal	210	4.28
access to general education, regardless of their		
abilities and disabilities.		
Students are treated equally when conducting	210	3.91
any activity inside or outside the class.		

Table 4.2 indicates the idea that inclusive education promotes equality, with the highest mean scores of 4.29 and 4.28 for the effectiveness of inclusion and equal access. However, while generally positive, there's room for improvement in treating students equally during activities, with a mean score of 3.91. Moreover, there is some concern about disabled students' performance, as indicated by a mean score of 3.80.

Table 4.3Social benefit

Items	N	Mean
Inclusive education provides opportunities for	210	4.29
students to participate in work and programs		
which helps to prepare for their future.		
An inclusive setting helps in social growth as	210	4.32
students interact with other children of similar		
age groups and levels.		
Students are supported not to be separated from	210	4.13
their peers based on disability.		
Inclusive education supports students to develop	210	4.23
friendships with their peers.		
Disabled students are encouraged to participate	210	4.08
in different school activities.		

Table 4.3 indicates the perception of school teachers regarding the social benefits of inclusive education. The highest mean score of 4.32 revealed majority of the teachers agreed that inclusive settings foster social growth through interaction with peers. Close behind, a mean score of 4.29 indicates teachers' support for the belief that inclusive education prepares students for their future. Additionally, inclusive education is seen as promoting friendships (m= 4.23), discouraging separation based on disability (m= 4.13), and encouraging disabled students' participation in school activities (m= 4.08).

Table 4.4Acceptance of diversity

Items	N	Mean
Students who attend mainstream schools benefit	210	4.23
in terms of acceptance of diversity.		
Inclusive education allows students to value	210	4.34
other's perspectives.		
Students learn to accept each other for who they	210	4.43
are & treat each other with respect.		
Students learn to help & cooperate.	210	4.45

Table 4.4 indicates the view of school teachers on the acceptance of diversity within inclusive education. The highest mean score of 4.45 depicts that students in inclusive settings learn to help and cooperate effectively. Close behind, mean scores of 4.43 and 4.34 suggest that students also learn to accept each other for who they are, treat each other with respect, and value diverse perspectives. Furthermore, a mean score of 4.23 highlights that attending mainstream schools benefits students in accepting diversity.

Table 4.5
Self-Esteem

Items	N	Mean
Students who are accepted by their peers feel	210	4.37
better about themselves and have high self-		
esteem.		
Inclusive education helps to create and reinforce	210	4.26
the positive behaviour of students.		
Students in an inclusive setting become more	210	4.10
confident.		
In an inclusive setting, student believe in their	210	4.20
abilities to learn, achieve & contribute to the		
world around them.		

Table 4.5 depicts the idea that inclusive education significantly boosts students' self-esteem. The highest mean score of 4.37 shows the majority of the teachers agreed that students who are accepted by their peers tend to feel better about themselves. Moreover, they see inclusive education as a way to foster positive behaviour (m= 4.26). Furthermore, teachers agreed that in an inclusive setting, students believe in their abilities to learn, achieve, and contribute with a mean score of 4.20. The mean score of 4.10 indicates all the teachers perceived that students in inclusive settings become more confident.

Part II: Challenges

Table 4.6Facilities and Accessibility

Items	N	Mean
The school compound is comfortable for children	210	2.88
with special needs.		
The classrooms are according to the	210	2.77
requirements of disabled students.		
Washrooms are accessible to children with	210	2.48
special needs.		
Elevators are available for disabled students.	210	1.68
Ramps for wheelchairs are available for disabled	210	2.21
students.		
The library is accessible.	210	2.38
Computer Labs are accessible.	210	2.72

Table 4.6 indicates that, in the context of challenges within inclusive education, school facilities and accessibility present major concerns. The mean score of 2.88 indicates that the school compound is not comfortable for children with special needs. Following closely is the mean score of 2.77, suggesting that classrooms need further adjustments to meet the requirements of disabled students. Accessibility to computer labs (m= 2.72) and libraries (m= 2.38) also falls short of ideal standards. Additionally, there's a substantial need for improvement in providing ramps for wheelchairs (m=

2.21) and washrooms accessible to children with special needs (m= 2.48). The most critical concern is the availability of elevators for disabled students, with the lowest mean score of 1.68.

Table 4.7

Trained Teachers

Items	N	Mean
Teachers are provided in-service teacher training	210	3.01
to learn about inclusive education.		
Teachers are given training regarding different	210	3.00
teaching & learning strategies for teaching in an		
inclusive environment.		
Teachers are given training for their professional	210	3.01
development that supports the teaching of		
students with disabilities.		
Teachers address Individualized lesson plans for	210	2.86
helping special needs students in an inclusive		
environment.		
Teachers create activities for all students.	210	3.17

Table 4.7 highlights the perception of teachers regarding teacher training. Notably, teachers agreed they create activities that cater for all students, as evidenced by the mean score of 3.17. This indicates a proactive attitude in promoting inclusivity within the classroom. Additionally, teachers are provided with in-service training to learn about inclusive education (m= 3.01) and receive training for professional development to support teaching students with disabilities (m= 3.01), representing a devotion to improving their skills in inclusive teaching. However, there is room for enhancement, particularly in the aspect of addressing individualized lesson plans to aid

special needs students in succeeding within inclusive environments, as indicated by a slightly lower mean score of 2.86.

Table 4.8Cooperation & Collaboration

Items	N	Mean	
An inclusive setting requires collaboration &	210	4.59	
cooperation among teachers and school			
administrators.			
An inclusive setting requires cooperation among	210	4.59	
teachers and parents.			
The school provides a platform for regular	210	4.53	
meetings to discuss learning problems & issues			
of the students with the principals.			
Teachers coordinate with the disabled children's	210	4.46	
parents about their learning problems, strengths			
& weaknesses.			
Parents of children with disabilities cooperate	210	4.40	
with teachers & principals in terms of their			
child's progress.			

Table 4.8 depicts the pivotal role of collaboration and cooperation within inclusive education. The highest mean score of 4.59 underscores the majority of the teacher's agreement that an inclusive setting necessitates collaboration among teachers and school administrators, as well as cooperation between teachers and parents. Additionally, with a mean score of 4.53, the table emphasizes that schools are providing platforms for regular meetings to address students' learning problems and issues with

principals, fostering ongoing communication. Furthermore, teachers actively coordinate with parents of disabled children to address their learning needs, strengths, and weaknesses, as indicated by a mean score of 4.46. This reflects a strong commitment to collaborative efforts in supporting students with disabilities. Similarly, parents of children with disabilities are perceived as cooperative partners with teachers and principals concerning their child's progress, with a mean score of 4.40.

Table 4.9 *Knowledge and Awareness*

Items	N	Mean
Teachers have knowledge & awareness about the	210	3.54
concept of Inclusive education.		
Teachers know how to address diverse learners'	210	3.54
needs inside the class.		
Teachers are aware of how to deal the students	210	3.56
with special needs in classrooms.		
Teachers know the different teaching strategies	210	3.42
to be used in an inclusive classroom.		
Teachers acquire a full medical history of	210	3.33
disabled children at the time of admission.		

Table 4.9 reveals that most of the teachers exhibit adequate knowledge and awareness in the context of inclusive education. They possess a reasonable understanding of the concept of inclusive education (m= 3.54) and are aware of how to address diverse learners' needs (m= 3.54) and deal with students with special needs (m= 3.56) within the classroom. However, their knowledge of different teaching strategies for an inclusive classroom slightly lags (m= 3.42). Moreover, there's room for improvement in the practice of acquiring complete medical history for disabled children upon admission, as indicated by a mean score of 3.33.

Table 4.10

Curriculum

Items	N	Mean
The curriculum is suitable according to the needs	210	2.94
of students with disabilities.		-17
The curriculum accommodates children's	210	2.98
special needs.		
The use of a diverse range of resources is part of	210	3.39
an inclusive curriculum.		
The curriculum reflects the diversity found in the	210	3.09
society.		

Table 4.10, reflects on how well the curriculum caters to the needs of students with disabilities in inclusive education. Mean scores range from 2.94 to 3.39, suggesting room for improvement. However, there's a more positive perception regarding the incorporation of diverse resources into the curriculum (m= 3.39), indicating efforts to include a variety of teaching materials. Furthermore, the curriculum reflects the diversity found in society (m= 3.09), which is a positive aspect. The curriculum has deficiencies regarding its suitability for students with disabilities as indicated by the mean score of 2.98.

Table 4.11

Prospects

Indicators of Prospects	Cumulative	Mean
Academic benefit	4.23	
Equality in Education	4.07	
Social benefit	4.21	
Acceptance of diversity	4.36	
Self-Esteem	4.23	

Table 4.11 provides a comprehensive view of the prospects associated with inclusive education, encompassing multiple dimensions and are indicated by cumulative mean scores. Firstly, in terms of academic benefit (Cumulative Mean= 4.23), teachers express a positive belief that inclusive education provides all students with valuable academic advantages, underlining the potential for learning and growth within these settings. Secondly, the aspect of equality in education with a cumulative mean of 4.07 also garners a favourable perspective. This suggests that teachers see inclusive education as a means to foster equality in educational opportunities. Thirdly, social benefit having a cumulative mean of 4.21, indicates that teachers perceive inclusive education as a platform for students to interact and grow socially, aligning with the broader goals of inclusivity. Moreover, acceptance of diversity receives the highest cumulative mean score of 4.36, indicating that the teachers support the

acceptance of diversity within inclusive education. Lastly, self-esteem with a 4.23 cumulative mean promotes the idea that inclusive education boosts students' self-esteem and overall well-being.

Table 4.12
Challenges

Indicators of Challenges	Cumulative Mean
Facilities and Accessibility	2.44
Trained Teachers	3.01
Cooperation	5.56
Knowledge and Awareness	3.47
Curriculum	3.1

Table 4.12 shows a comprehensive perspective on the challenges inherent in inclusive education, aggregating various dimensions and denoting them through cumulative mean scores. Firstly, facilities and accessibility (Cumulative Mean= 2.44) emerge as a prominent challenge, indicating that issues related to school infrastructure and resource accessibility for students with disabilities are substantial hurdles that require immediate attention and improvement. Secondly, the teachers signify that, while challenges exist, there are ongoing efforts to equip teachers with the necessary training and support for inclusive practices as indicated by a cumulative mean of 3.01. Thirdly, the aspect of cooperation (Cumulative Mean=5.56) shines as a strength in inclusive education, with the highest cumulative mean score. This suggests that cooperation among teachers and stakeholders is not a significant challenge; instead, it thrives within inclusive educational settings. Fourthly, knowledge and awareness

(Cumulative Mean= 3.47) present challenges, signifying that teachers exhibit a reasonable understanding and awareness in the context of inclusive education, with room for improvement. Lastly, curriculum (Cumulative Mean=3.10) reflects challenges, indicating that there are obstacles to aligning the curriculum with the needs of students with disabilities.

Table 4.13Prospects and Challenges

Indicators	Cumulative Mean
Prospects	4.22
Challenges	3.53
Challenges	3.33

Table 4.13 provides an overview by combining the cumulative mean scores of both prospects and challenges in the context of inclusive education. Prospects with a cumulative mean of 4.22 represent the positive viewpoints and potential benefits of inclusive education. On the other hand, challenges with a cumulative mean of 3.53 encompass the obstacles and difficulties associated with inclusive education.

4.2 Analysis of Qualitative Data (Responses to Interview Questions)

A semi-structured interview was conducted among 19 secondary school principals. The responses were received from all 19 principals. The researcher approached all the principals by visiting their offices. Before the interview, a brief description was provided to principals to the principals about the study. Thematic analysis technique was used to analyze "Qualitative Data". The thematic analysis of interviews with principals sheds light on various aspects, challenges & recommendations related to inclusive education in mainstream schools. For the analysis of qualitative data following steps were followed which are:

- ➤ Become familiar with the data
- > Generate initial codes,
- > Search for themes,
- > Review and define themes,
- ➤ Write-up (Maguire & Delahunt, 2017).

The following themes were generated:

- 1. Infrastructure and Accessibility
- 2. Teaching and Learning Resources
- 3. Teacher Training and Awareness
- 4. Teaching Methods & Strategies
- 5. Practice of Inclusive Education
- 6. Solutions for Improvement

4.2.1 Infrastructure and Accessibility

All of the principals said that there is a need for improved infrastructure in schools. Participants highlighted the lack of ramps, elevators, and wheelchair-accessible pathways, making it difficult for physically disabled students to navigate the

school environment. Inadequate restroom facilities for disabled students were noted, emphasizing the necessity for accessible washrooms. Specialized equipment such as braille materials, spectacles, hearing aids, and wheelchairs are often lacking but considered essential for inclusive education It became evident that proper lighting and well-lit classrooms are crucial in accommodating students with visual impairments. As one participant responded:

"Proper ramps and elevators for wheelchair accessibility, and accessible restrooms are needed. Braille should be available for students with low vision. It's important to create an environment that promotes inclusivity and ensures that all students can access education without barriers."

Another participant responded as:

"Sufficient budget be allocated for improving infrastructure like conducting pathways for wheelchairs, washrooms should be according to the needs of differently-abled students. These changes will help ensure that all students can fully participate and thrive in our school environment."

One participant responded as:

"We do have 1 to 2 ramps which are built on my own but need more ramps. ramps and elevators for wheelchair accessibility, and accessible restrooms are needed. Braille should be available for students with low vision. Moreover, assistive technology like hearing aids, spectacles, magnifiers, and appropriate lighting is required in classrooms. It's important to create an environment that promotes inclusivity and ensures that all students can access education without barriers."

4.2.2 Teaching and Learning Resources

Participants expressed concern over the limited availability of specialized teaching materials and equipment for disabled students. The majority (89.5%) of the respondents stated that teaching-learning resources and equipment are not available for disabled students. They have adequate teaching-learning resources and equipment specifically designed for disabled students. Educators often rely on basic resources such as large prints, audio, and videos to facilitate learning. Items such as braille resources, spectacles, and hearing aids were lacking. The use of technology and multimedia resources was not widespread among the respondents. Few (10.5%) respondents said that they used to manage resources on their own like hearing aids, spectacles, charts, models & wheelchairs, which could potentially limit the variety of teaching and learning methods available. As one participant responded:

"No special resources and equipment are available. In our school, the concept of inclusive education is not popularized. Therefore, teaching-learning resources are not enough and are even not provided. So, we usually use large prints, audios or tape recorders to facilitate such students."

Another participant responded as:

"Audios, large prints or digital texts are provided accordingly to the students by the teachers. Other than that, no such resources & equipment are available like brails, spectacles & hearing aids."

One participant responded as:

"No such resources provided by the government. We cater for students on our own. We normally have charts, models, audio and videos."

4.2.3 Teacher Training

In response majority (68.4%) of the principals said that their school teachers have received training but there are limitations in providing training to all teachers due to scheduling constraints. This inconsistent teacher training in inclusive education is a significant challenge, leading to disparities in effectively supporting disabled students. They said that not all teachers were aware of the concept of inclusive education due to a lack of knowledge because of not receiving proper training. The lack of awareness and knowledge about inclusive education among teachers was identified as an obstacle to its successful implementation according to the response given by the school principals. Few (31.6%) principals said that their teachers have received the necessary training. As one participant responded:

"Yes, training is provided to a few teachers. As all of them are not able to go to classes & we can't give leave to students during work hours. After receiving training, the teachers who attended discussed with the rest of the teachers who didn't attend that training session. But still, they don't have much awareness and knowledge about the concept of inclusive education."

Another respondent said:

"Yes, training is given to teachers but only a few teachers have received that training. I also have attended a workshop recently related to dyslexia and dysgraphia."

One participant responded as:

"Yes, training regarding inclusive education is provided to my school teachers but not all teachers attended that training session because it is not possible to give leave to all students during working hours I mean to say on weekdays. I have also attended a workshop related to dyslexia and dysgraphia recently."

4.2.4 Teaching methods & strategies

In response majority (78.9%) of respondents responded that they provide individual attention to address the needs of disabled students. They also mentioned that they create remedial classes & individualized lesson plans, as well as use of visual aids to support these students. Few (21.1%) respondents mentioned that they adapt tests and assessments to accommodate students with speech difficulties. As one participant responded:

"At our school, we prioritize individual attention for disabled students to meet their specific needs. We adopt written tests for students with speech difficulties. Additionally, we utilize parallel teaching to provide extra support and reinforcement. Our approach is student-centred, focusing on the unique learning needs of disabled students."

Another participant responded as:

"We work with students with learning disabilities by repeating the syllabus again and again. Moreover, Individualized lesson plans are used to help students with special needs. Lastly, low-vision students are made to sit in front of the class. Sometimes we utilize parallel teaching to cater to differently-abled students. Sometimes we employ Differentiated instruction to effectively teach and address the needs of disabled students."

Another participant responded as:

"At our school, we prioritize individual attention for disabled students to meet their specific needs. We adopt written tests for students with speech difficulties to avoid the embracement that students face while speaking. Additionally, we utilize parallel teaching to provide extra support and reinforcement. Our approach is student-centred, focusing on the unique learning needs of disabled students. Low vision and partially deaf students are made to sit in front of class."

4.2.5 Practice of Inclusive Education

The majority (62.63%) of the principals said that inclusive education is not being practised in schools in its true sense. It is being practised only in policies, programs & words. In response few (37.37%) respondents said that inclusive education is being practised in schools but there are challenges in its practical implementation like limited resources, infrastructure, and well-trained staff which hinder the successful practice of inclusive education in some schools. As one of the participants responded:

"In Pakistan, we can say that inclusive education is practised in legal and policy frameworks, in different meetings, collaborations & awareness but practically it is not."

Another participant responded as:

"Partially inclusive, as for a successful implementation of inclusive education appropriate resources, infrastructure, and trained staff is needed. Without them, we can't practice inclusive education. By only making policies and plans we can't achieve our objectives."

One of the participants responded as:

"Inclusive education is practised in schools but not in the true sense. It is only in practice in policies, plans & words. Without proper resources, budget, infrastructure & trained teachers we can't successfully practice inclusive education."

Another participant responded as:

"Not inclusive at all. As because for a successful implementation of inclusive education appropriate resources, infrastructure, and trained staff are needed. Without them, we can't practice inclusive education."

One more participant responded as:

"In a real sense in the majority, inclusive education is not practised in schools.

As teachers are not well trained as well as physical facilities are not available.

Moreover, the school compound is not appropriate for inclusive education."

4.2.6 Solutions for Improvement

In response, 100% of the respondents said that for the proper implementation of inclusive education, the allocation of resources, budgeting, and the provision of facilities are required. They emphasized the need for teacher training and the development of an inclusive curriculum. Further, awareness campaigns, engagement with parents and communities, and addressing attitudinal barriers are considered crucial for promoting inclusivity. Respondents also suggested that there is a need for consistent policy enforcement and support. As one participant responded:

"To create an inclusive and supportive learning environment, it is imperative that we prioritize the provision of proper facilities, budgeting, teacher training, infrastructure for disabled students, and the appointment of psychologists in our schools."

Another participant responded as:

"To create a truly inclusive educational environment that supports the success of all students, we must ensure the provision of proper facilities, allocate adequate budgeting, enhance teacher training and skills, and actively engage parents and the community through awareness and advocacy programs related to inclusive education."

One participant responded as:

"It is recommended to establish and consistently enforce clear minimum standards, allocate sufficient resources and infrastructure, ensure the availability of well-trained and skilled teachers through regular training and workshops, and

prioritize the provision of appropriate facilities while maintaining responsible budgeting practices, including the construction of new infrastructure to cater to the needs of disabled students, to foster excellence and inclusivity within our school system."

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Inclusive education removes barriers and enables all students, including the previously excluded group, to learn and participate effectively within the general school education system. The study aimed to examine the prospects and challenges of inclusive education at the secondary level in Islamabad. The study was based on the following objectives: To examine the current status of inclusive education, to explore the prospects of inclusive education at the secondary level in Islamabad, to explore the challenges faced in implementing inclusive education in schools and to find out possible solutions for the successful implementation of inclusive education. The study was delimited to an urban area and Islamabad Model Schools for Girls. A mixed-method approach was used for this study. The research design was a convergent mixed-method design. The population of the study constituted 19 principals and 466 teachers from girls' secondary schools situated in the urban area of Islamabad. From the targeted population, a sample of 19 principals was drawn by using universal sampling and 210 teachers were drawn by using a simple random sampling technique. The number generator method was used to draw the sample.

Self-developed questionnaire on a five-point Likert scale, consisting of 49 items was used for this proposed study. The other one was a semi-structured interview consisting of six questions. The questionnaire was used to explore the prospects and challenges of inclusive education by taking the perception of 210 secondary school teachers and a semi-structured interview was used to explore challenges, and status and

to find out the possible solutions for the successful implementation of inclusive education from 17 school principals. Indicators of the quantitative tool include prospects, academic benefit (6), social benefits (5), equality of education (4), acceptance of diversity (4), self-esteem of students (4), challenges, facilities (7), suitable curriculum (4), trained teachers (5), knowledge & awareness (5) and cooperation (5). Qualitative tool parameters were teaching methods and strategies, current status, adjustment for schools' infrastructure, teaching-learning resources, teachers training and lastly the possible solutions for the successful implementation of inclusive education.

Instruments were constructed according to the objectives. To ensure the validity of the instrument, tools were circulated among 7 teachers to be comprehensively checked. After the validation of the instruments, suggestions given by the experts were incorporated and refined in light of their recommendations. The pilot test was conducted to check the clarity of words and understanding of the respondents about the statements. The pilot test was conducted on a small sample i.e. 10% (2 principals and 41 school teachers) from the targeted population to ensure the instruments were appropriate. Furthermore, to check the reliability of the instrument, data Gathered from the pilot test was analyzed through SPSS by applying Cronbach Alpha.

For data analysis, the researcher used descriptive statistics (mean score) & thematic analysis to analyze the qualitative data gathered through semi-structured interviews.

5.2 Findings

5.2.1 Quantitative Findings (teacher's data)

1. The findings indicate secondary school teachers largely perceive inclusive education positively for academic benefits—students acquire practical life skills

- (mean score 4.41), learn better alongside peers (mean score 4.35), and are more motivated (mean score 4.36). However, slight reservations exist regarding academic benefits for disabled students (mean score 3.99) and non-disabled students (mean score 3.98), despite overall positive perceptions.
- 2. The findings indicate the idea that inclusive education promotes equality, with the highest mean scores of 4.29 and 4.28 for the effectiveness of inclusion and equal access. Moreover, there is concern about disabled students' performance, as indicated by a mean score of 3.80.
- 3. The findings highlighted that the highest mean score of 4.32 revealed that inclusive settings foster social growth through peer interaction. A mean score of 4.29 indicates teacher's support for the belief that inclusive education prepares students for their future. Additionally, inclusive education encourages disabled students' participation in school activities (M= 4.08).
- 4. The findings indicate that a mean score of 4.45 depicts that students in inclusive settings learn to help and cooperate effectively. Furthermore, a mean score of 4.23 highlights that attending mainstream schools benefits students in accepting diversity.
- 5. Based on findings, it is indicated the highest mean score 4.37 showed that students who are accepted by their peers tend to feel better about themselves.
 Moreover, the mean score of 4.10 indicates all the teachers perceived that students in inclusive settings become more confident.
- 6. The findings show that a mean score of 2.88 indicates the school compound is not comfortable for children with special needs. The most critical concern is the availability of elevators for disabled students, with the lowest mean score of 1.68.

- 7. The findings show that the teachers agreed they create activities that cater for all students, as evidenced by the mean score of 3.17. However, there is room for enhancement, particularly in the aspect of addressing individualized lesson plans to aid special needs students in succeeding within inclusive environments, as indicated by a mean score of 2.86.
- 8. Findings indicate the highest mean score of 4.59 underscores that an inclusive setting necessitates collaboration among teachers and school administrators, as well as cooperation between teachers and parents. Similarly, parents of children with disabilities are perceived as cooperative partners with teachers and principals concerning their child's progress, with a mean score of 4.40.
- 9. The findings indicate that teachers possess a reasonable understanding of the concept of inclusive education (M= 3.54). However, there's room for improvement in the practice of acquiring complete medical history for disabled children upon admission, as indicated by a mean score of 3.33.
- 10. The findings reflect on how well the curriculum caters for the needs of students with disabilities in inclusive education. Mean scores range from 2.94 to 3.39, suggesting room for improvement. The curriculum has deficiencies regarding its suitability for students with disabilities as indicated by the mean score of 2.98.
- 11. It is found that in terms of academic benefit (Cumulative Mean= 4.23), teachers express a positive belief that inclusive education provides all students with valuable academic advantages. A cumulative mean of 4.07 indicated that teachers see inclusive education as a means to foster equality in educational opportunities. A cumulative mean of 4.21, indicates that teachers perceive inclusive education as a platform for students to interact and grow socially. Moreover, a highest cumulative mean score of 4.36, indicates that the teachers

- support the acceptance of diversity within inclusive education. Lastly, self-esteem with a 4.23 cumulative mean promotes the idea that inclusive education boosts students' self-esteem.
- 12. The findings reveal that facilities and accessibility (Cumulative Mean= 2.44) emerge as a prominent challenge. Secondly, a cumulative mean of 3.01 shows the ongoing challenges in equipping teachers with the necessary training. A cumulative mean of 5.56 suggests that cooperation among teachers and stakeholders is not a significant challenge. Cumulative Mean of 3.47 shows that teachers exhibit a reasonable understanding and awareness in the context of inclusive education, with room for improvement. Cumulative Mean of 3.10 indicates that there are obstacles to aligning the curriculum with the needs of students with disabilities.
- 13. The study reveals the prospects with a cumulative mean of 4.22 which represents the positive viewpoints and potential benefits of inclusive education, including academic and social benefits, equality, acceptance of diversity, and enhanced self-esteem. overall, there is an optimistic outlook among school teachers regarding the prospects of inclusive education. Moreover, the findings show the challenges with a cumulative mean of 3.53 which encompasses the obstacles and difficulties associated with inclusive education, such as facility and accessibility issues, the need for trained teachers, cooperation, knowledge, awareness, and curriculum alignment challenges.

5.2.2 Qualitative Findings (Principals data)

 The interview responses from school principals shed light on the state of inclusive education in mainstream schools. Firstly, all of the respondents said that significant improvements are needed in school infrastructure to support

- inclusive education. Concerns were raised about the lack of ramps, elevators, wheelchair-accessible pathways, and accessible washrooms, which hindered the mobility of physically disabled students.
- 2. It was also found that specialized equipment such as braille materials, spectacles, hearing aids, and wheelchairs were often lacking but considered essential for inclusive education. Proper lighting and well-lit classrooms were identified as crucial for accommodating students with visual impairments.
- 3. The availability of teaching and learning resources for disabled students emerged as a significant concern. The majority (90%) of respondents expressed worries about the limited availability of specialized teaching materials and equipment tailored to the needs of disabled students. Teachers often had to rely on basic resources like large prints, audio, and videos to facilitate learning. Few (10.5%) respondents said that they used to manage resources on their own like hearing aids, spectacles, charts, models & wheelchairs, which could potentially limit the variety of teaching and learning methods available.
- 4. Teacher training was also an area of consideration. The majority (68.4%) of the principals acknowledged that some of their school teachers had received training in inclusive education, but scheduling constraints hindered comprehensive training for all teachers, resulting in inconsistent teacher training. They said that not all teachers were aware of the concept of inclusive education due to a lack of knowledge because of not receiving proper training. The lack of awareness and knowledge about inclusive education among teachers was identified as an obstacle to its successful implementation according to the response given by the school principals. Few (31.6%) principals said that their teachers have received the necessary training.

- 5. In terms of teaching methods and strategies, the majority (78.9%) of the respondents said that they provide individual attention, create remedial classes, and develop individualized lesson plans to support disabled students. Visual aids were commonly used to assist these students. However, few (21.1%) of respondents mentioned adapting tests and assessments for students with speech difficulties.
- 6. The practice of inclusive education revealed mixed perspectives. A few (37.37%) of the respondents said that inclusive education is being practised in schools, they highlighted challenges such as limited resources, infrastructure, and well-trained staff hindering its success. While majority (62.63%) of principals said that inclusive education is not being practised in its true sense, emphasizing the need for proper resources, budget, infrastructure and trained teachers for successful implementation (Objective # 1).
- 7. The interviewees provided constructive solutions for improvement. All respondents unanimously said that the government may allocate resources, budget, and provide facilities for the proper implementation of inclusive education. They stressed the need for teacher training and the development of an inclusive curriculum. Awareness campaigns, engagement with parents and communities, and addressing attitudinal barriers were considered crucial for promoting inclusivity. Consistent policy enforcement and support were also suggested.

5.3 Discussion

The study aimed to explore the prospects and challenges of inclusive education at the secondary level in Islamabad. Based on the findings of the study, results indicate the challenges that comprehend obstacles and difficulties related to inclusive education,

including facility and accessibility issues, the need for trained teachers, cooperation, and curriculum alignment challenges. This finding is consistent with the finding of the study conducted by Lakshmi (2018) where he concluded that inclusive education is ineffective without proper training of teachers, infrastructural facilities, curriculum modification and educational materials. This result is also supported by Chaudhary (2018) who revealed in his study that proper school buildings, provision of adequate human resources and material resources, suitable curriculum & skilled educators are necessary implementation of inclusive education.

The study revealed limited availability of specialized teaching materials and equipment tailored to the needs of disabled students. Critical items such as braille resources, spectacles, and hearing aids were reported to be in short supply. The findings of the study were supported by Ludago (2020) that there are inadequate educational facilities, equipment and services for children with special needs including those with disabilities.

The qualitative findings revealed that there is a need for a greater budget for infrastructure, societal awareness and attitudinal changes. These findings are similar to the results of the study conducted by Ludago (2020) who concluded the challenges for the implementation of inclusive education which include lack of budget, negative attitude of teachers and community awareness.

The study revealed that inclusive education has a significant positive impact on students' self-esteem and positive behaviour among students. It is supported by Fareo (2020) who concluded that children who are placed in a general classroom environment have higher self-esteem and positive behaviour.

The study conducted by Fareo (2020) concluded that students with disabilities & without disabilities benefit academically and socially when placed in normal schools where inclusive education promotes equality and helps students in acceptance of

diversity by developing friendly relationships. The findings of the current study indicated that teachers generally have a positive outlook on the prospects of inclusive education, emphasizing its potential benefits in academic, social, and personal development, as well as its role in promoting equality and acceptance of diversity within educational settings. These findings are consistent with the findings of the study conducted by Fareo (2020). Moreover, a new theme emerged from the current study and that was solutions for improvement where majority of the respondents said that for the proper implementation of inclusive education, the allocation of resources, budgeting, and the provision of facilities are required and emphasized the need for teacher training and the development of an inclusive curriculum. Further, awareness campaigns, engagement with parents and communities, and addressing attitudinal barriers are considered crucial for promoting inclusivity. Respondents also suggested that there is a need for consistent policy enforcement and support to implement inclusive education successfully.

5.4 Conclusion

- 1. It is concluded that teachers have an overall positive outlook on the prospects of inclusive education. They see it as a platform for academic, social, and personal development, as well as a means to promote equality and acceptance of diversity within educational settings. Moreover, findings revealed that inclusive education is strongly associated with enhancing students' self-esteem and promoting positive behaviour, as perceived by teachers.
- 2. It is concluded that both groups identified significant shortcomings in school infrastructure and resources. Teachers highlight inadequate inaccessible facilities, such as ramps, elevators, wheelchair-accessible pathways, and restroom facilities. Principals reinforced these concerns and also highlighted the

- scarcity of specialized equipment like braille materials and hearing aids, noting the need for proper lighting and well-equipped classrooms to support visually impaired students. The limited availability of teaching and learning resources for disabled students remains a significant barrier.
- 3. It is further concluded that there is a consensus on the need for improved teacher training. Teachers report a proactive attitude towards inclusivity but indicate that more comprehensive training is required, particularly for developing individualized lesson plans. Principals acknowledged the constraints in providing consistent training to all teachers and identified a general lack of awareness about inclusive education among staff. This gap in training and knowledge is seen as a major obstacle to effective implementation.
- 4. Based on the findings it is concluded that teachers expressed a favorable view of inclusive education's role in promoting equality and acceptance of diversity. They believe it helps students learn to cooperate and respect diverse perspectives. However, both teachers and principals noted that the current curriculum often fails to adequately cater to the needs of students with disabilities, suggesting a need for further development to ensure inclusivity.
- 5. It is concluded that teachers and principals emphasized the importance of cooperation among educators, administrators, and parents. Regular meetings and active coordination with parents are seen as essential for addressing students' learning needs and fostering an inclusive environment.
- 6. Based on the responses it is concluded that there are mixed perspectives on the current status of inclusive education. Few principals said that it is being practised in schools, while the majority believe challenges are hindering\ its true implementation. So, to ensure successful inclusive education, it is crucial to

- address these challenges by providing proper resources, budget, infrastructure, and trained teachers (Objective # 1).
- 7. Based on the solutions given by the principals it is concluded that principals unanimously recommend government intervention to allocate resources, budget, and facilities to support inclusive education. They stressed the importance of ongoing teacher training, developing an inclusive curriculum, and conducting awareness campaigns. Engaging parents and communities, addressing attitudinal barriers, and enforcing consistent policies are also crucial steps for promoting inclusivity.
- 8. It is concluded that the findings of both the quantitative and qualitative data provide a comprehensive understanding of the challenges faced in implementing inclusive education in mainstream schools. The findings of the study showed the majority of principals acknowledged that some teachers had received training in inclusive education, but scheduling constraints hindered comprehensive training for all teachers, resulting in inconsistent teacher preparation. Additionally, the lack of ramps, elevators, wheelchair-accessible pathways, and accessible washrooms in schools was identified as a significant barrier to the mobility of physically disabled students. Furthermore, the scarcity of specialized equipment such as braille materials, spectacles, hearing aids, and wheelchairs posed additional challenges in meeting the diverse needs of disabled students.

5.5 Limitation of the study

The study aimed to include schools where the pilot project on inclusive education was initially implemented. To achieve this, a comprehensive list of these schools was required. However, upon visiting the Federal Directorate of Education, the researcher was informed that the pilot project had ended 10 to 12 years ago, and they no longer had the list of the participating schools. Consequently, the researcher was unable to specifically target these schools for inclusion in the study. If the list had been available, it could have potentially provided more accurate and relevant data regarding the current status of inclusive education. Thus, while the researcher encountered challenges in accessing relevant data, the researcher unexpectedly identified a school with prior involvement in a pilot project during the data collection process, offering valuable insight into the research.

5.6 Recommendations

- As the findings highlighted the significant challenges in school infrastructure
 and accessibility, it is recommended that educational authorities allocate
 resources to improve facilities. This includes constructing ramps, installing
 elevators, creating wheelchair-accessible pathways, and ensuring well-lit
 classrooms. Adequate restroom facilities for disabled students should also be a
 priority.
- 2. Findings highlighted the limited availability of specialized teaching materials and equipment, so it is recommended that school administration and principals invest in acquiring braille materials, spectacles, hearing aids, and wheelchairs. Additionally, technology and multimedia resources may be integrated into teaching practices to enhance the variety of learning methods.
- 3. The findings indicated the disparities in teacher training, so to overcome the disparities the Ministry of Education may establish comprehensive programs for inclusive education training. This may be accessible to all teachers, addressing scheduling constraints.

- 4. The findings reflect that teachers are dedicated to promoting inclusivity through activities, in-service training, and professional development. To further enhance their inclusive teaching skills, it is recommended that schools may encourage the adoption of effective teaching methods and strategies in inclusive classrooms. This includes developing individualized lesson plans. Teachers may also be trained in adapting tests and assessments to accommodate differently abled students.
- 5. The research findings indicate teacher's views on inclusive education, including its academic benefits, promoting equality, social interaction, embracing diversity, and students' self-esteem. To enrich inclusive education practice, it is recommended that policymakers implement a diverse curriculum, provide teacher training, and encourage community and parental involvement to create a supportive and equitable learning environment.
- 6. The practice of inclusive education brings forth mixed viewpoints, with some recognizing its presence but emphasizing challenges like limited resources, budget, infrastructure and insufficiently trained staff. To enhance inclusive education, it is recommended that the government prioritize the allocation of necessary resources, budget, infrastructure, and teacher training to ensure its effective implementation and success (Objective # 1).

5.7 Recommendations for Future Researchers

Future researchers may conduct detailed research on teacher training programs
in inclusive education to explore the effectiveness of different training
approaches and their impact on teacher readiness and confidence in supporting
students with disabilities.

- 2. Researchers may research the impact of resource availability on the quality of inclusive education.
- 3. Research may be conducted on existing policies related to inclusive education and assess their effectiveness in promoting inclusive practices.
- 4. Research on attitudinal barriers and biases within school communities and society that may hinder the successful implementation of inclusive education may be conducted by future researchers.
- 5. Longitudinal studies may be conducted to track the academic and social progress of students in inclusive education settings over time to gain a deeper understanding of the long-term effects of inclusive practices.
- 6. Future researchers may collect the baseline data of data collection before conducting research on this area.

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INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD FACULTY OF EDUCATION

DEPARTMENT OF EDUCATIONAL LEADERSHIP AND MANAGEMENT

Questionnaire

I am MS scholar, conducting research on Inclusive education at the secondary level in Islamabad: Prospects and challenges. Please take a few mintues to complete this

Please read and evaluate each item according to the scale given below.

SA= Strongly Agree **A**= Agree **N**= Neutral **D**= Disagree **SD**= Strongly Disagree

Sr.No.	Statements	SA	A	N	D	SD			
Prospo	Prospects								
a) .	Academic benefit								
1.	Students benefit academically from								
	being placed in inclusive settings.								
2.	Disabled students benefit academically								
	from being placed in inclusive settings.								
3.	Students with mild disabilities learn								
	better with their peers in inclusive								
	classes.								
4.	The inclusion of students with minor								
	disabilities in the mainstream								

	classroom is beneficial to other			
	students.			
5.	Secondary-level children with varying			
	abilities are often better motivated			
	when they learn in an inclusive setting.			
6.	Students learn new skills through			
	imitation that equips them to live in			
	their communities.			
b)]	Equality in Education			
1.	Disabled students perform equally with			
	other students in an inclusive			
	environment.			
2.	The best way to ensure equality in			
	education is to make all students learn			
	in inclusive classes.			
3.	Inclusive education allows all students			
	equal access to general education,			
	regardless of their abilities and			
	disabilities.			
4.	Students are treated equally when			
	conducting any activity inside or			
	outside the class.			
c)	Social benefit			

1.	Inclusive education provides			
	opportunities for students to participate			
	in work and programs which helps to			
	prepare for their future.			
2.	An inclusive setting helps in social			
	growth as students interact with other			
	children of similar age groups and			
	levels.			
3.	Students are supported not to be			
	separated from their peers based on			
	disability.			
4.	Inclusive education supports students			
	to develop friendships with their peers.			
5.	Disabled students are encouraged to			
	participate in different school			
	activities.			
d) .	Acceptance of diversity			
1.	Students who attend mainstream			
	schools benefit in terms of acceptance			
	of diversity.			
2.	Inclusive education allows students to			
	value other's perspectives.			

3.	Students learn to accept each other for			
	who they are & treat each other with			
	respect.			
	-			
4.	Students learn to help & cooperate.			
e) !	Self-Esteem			
1.	Students who are accepted by their			
1.	-			
	peers feel better about themselves and			
	have high self-esteem.			
2.	Inclusive education helps to create and			
	-			
	reinforce the positive behaviour of			
	students.			
3.	Students in an inclusive setting become			
	more confident.			
_				
4.	In an inclusive setting, students believe			
	in their abilities to learn, achieve &			
	contribute to the world around them.			
Challen	nges			
a)]	Facilities & Accessibility			
1.	The school compound is comfortable			
	for children with special needs.			
	-			
2.	The classrooms are according to the			
	requirements of disabled students.			

3.	Washrooms are accessible to children			
	with special needs.			
4.	Elevators are available for disabled			
	students.			
5.	Ramps for wheelchairs are available			
	for disabled students.			
6.	The library is accessible.			
7.	Computer Labs are accessible.			
b)	Trained teachers			
1.	Teachers are provided in-service			
	teacher training to learn about inclusive			
	education.			
2.	Teachers are given training regarding			
	different teaching & learning strategies			
	for teaching in an inclusive			
	environment.			
3.	Teachers are given training for their			
	professional development that supports			
	the teaching of students with			
	disabilities.			
4.	Teachers address Individualized lesson			
	plans to help special needs students in			
	an inclusive environment.			

5.	Teachers create activities for all			
	students.			
c)	Cooperation & Collaboration			
1.	An inclusive setting requires			
	collaboration & cooperation among			
	teachers and school administrators.			
2.	An inclusive setting requires			
	cooperation among teachers and			
	parents.			
3.	The school provides a platform for			
	regular meetings to discuss learning			
	problems & issues of the students with			
	the principals.			
4.	Teachers coordinate with the disabled			
	children's parents about their learning			
	problems, strengths & weaknesses.			
5.	Parents of children with disabilities			
	cooperate with teachers & principals in			
	terms of their child's progress.			
d)	Knowledge & Awareness			
1.	Teachers have knowledge & awareness			
	about the concept of Inclusive			
	education.			

2.	Teachers know how to address diverse			
	learners' needs inside the class.			
3.	Teachers are aware of how to deal the			
3.				
	students with special needs in			
	classrooms.			
4.	Teachers know the different teaching			
	strategies to be used in an inclusive			
	classroom.			
5.	Teachers acquire a full medical history			
	of disabled children at the time of			
	admission.			
e) (Curriculum			
1.	The curriculum is suitable according to			
1.	The curriculum is suitable according to the needs of students with disabilities.			
2.				
	the needs of students with disabilities.			
	the needs of students with disabilities. The curriculum accommodates			
2.	the needs of students with disabilities. The curriculum accommodates children's special needs.			
2.	the needs of students with disabilities. The curriculum accommodates children's special needs. The use of a diverse range of resources			
3.	the needs of students with disabilities. The curriculum accommodates children's special needs. The use of a diverse range of resources is part of an inclusive curriculum.			
3.	the needs of students with disabilities. The curriculum accommodates children's special needs. The use of a diverse range of resources is part of an inclusive curriculum. The curriculum reflects the diversity			

INTERVIEW GUIDE FOR SCHOOL PRINCIPALS

Respected Sir/Ma'am

I tayyaba Waseem Abbasi of Educational Leadership and Management from International Islamic University Islamabad researching the topic "INCLUSIVE EDUCATION AT SECONDARY LEVEL IN ISLAMABAD: PROSPECTS AND CHALLENGES". Following are the questions regarding the inclusive education challenges, status and possible solutions for the successful implementation of inclusive education. Your response will be highly appreciated, and the data requested will not be used for any other purpose apart from academics.

- 1. Which teaching methods and strategies do you use to teach and address disabled students (learning disabilities & physically disabled)?
- 2. What are the adjustments needed in the school's infrastructure for inclusive education?
- 3. What Sort of teaching-learning resources, materials, and equipment for disabled students are available?
- 4. Does the Ministry of Education provide and arrange workshops for teachers regarding inclusive education?
- 5. Do you think that inclusive education is being practised in schools?
- 6. Give suggestions and recommendations for the proper implementation of Inclusive education in mainstream schools.

List of Secondary Level Girls Schools in Islamabad

SR.	Name of School	No. of Teachers
1.	IMSG (VI-X) G-6/1-3	33
2.	IMSG (VI-X) G-6/2	29
3.	IMSG (VI-X) G-7/1	32
4.	IMSG (VI-X) G-7/2	26
5.	IMSG (VI-X) F-7/2	19
6.	IMSG (VI-X) F-6/1	28
7.	IMSG (I-X) P.M. Colony G-5 Islamabad	16
8.	IMSG (VI-X) E-8	19
9.	IMSG (VI-X) E-9	33
10.	IMSG (VI-X) G-8/2	14
11.	IMSG (VI-X) G-9/4	13
12.	IMSG (I-X) G-9/1	28
13.	IMSG (I-X) G-10/1	22
14.	IMSG (I-X) G-10/3	30
15.	IMSG (I-X) G-11/2	27
16.	IMSG (VI-X) F-11/1	18
17.	IMSG (VI-X) I-8/1	26
18.	IMSG (VI-X) I-10/4	29
19.	IMSG (VI-X) I-9/4	24
Total		466