

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,200

Open access books available

168,000

International authors and editors

185M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



Chapter

Perspective Chapter: The Barriers in Inclusive Set-Up for Students with Visual Impairment at Higher Education Level - Pakistan Scenario

Kashif Iqbal and Samina Ashraf

Abstract

Higher education is contemplated for visually impaired students as a high standard of education towards apex professions in life. Students with visual impairment experience numerous barriers related to their social and educational life. This chapter intends to the barriers at the higher education level that visually impaired students experience in Pakistan. It also includes a brief introduction to the basic concept of inclusive education and the importance of higher education for visually impaired students. This chapter also identifies the needs and the difficulties, which visually impaired students face at the higher education level. Furthermore, the chapter reflects the status of inclusive education at the higher education level in Pakistan. The commitment of Pakistan to inclusive education has been described in this chapter. The solution to overcome the barriers has also been mentioned in this chapter. The chapter contains the future of inclusive education in Pakistan at the higher education level. The chapter recommends accessible infrastructure, training and orientation sessions for teachers, development of resource centres at all higher education institutes in Pakistan, provision of free assistive devices to visually impaired students and project-based initiative by the higher education commission of Pakistan.

Keywords: barriers, inclusive education, visually impaired, students, Pakistan

1. Introduction

Students with visual impairment experience numerous barriers in social and educational matrixes. A suitable life status can be set by obtaining higher education by reducing barriers to accessibility, social adjustment and educational endeavours. In Pakistan, a supportive atmosphere for inclusive learning allows students with visual impairments to study alongside their sighted peers, regardless of their talents and shortcomings, in order to achieve the highest standards and position in life. Proper professional expertise, adequate resources, disability friendly environment, acceptance and most importantly qualified trained staff are key factors to removing barriers that students with visual impairment face. There is a dire need to address the

barriers or challenges that students with visual impairment experience at the higher education levels in Pakistan.

Therefore, this chapter will highlight the solutions for the elimination of the barriers by making an equitable approach to education for students with visual impairment in inclusive settings.

2. Objectives

After reading this chapter, the readers will be able to:

- Apprehend inclusive education.
- Understanding the needs of students with visual impairment in higher education.
 - Comprehend the status of inclusive education at higher education level in Pakistan.
 - Identify the barriers in an inclusive setting for visually impaired students.
 - Recognise higher education support for visually impaired students in Pakistan.
 - Find out the solutions for removing the barriers in the inclusive set-up at higher education level for visually impaired students.
 - Think about the future of inclusive set-up at higher education level in Pakistan.

Inclusive education is the educational approach, which really requires in-depth and philosophical strategies. Whereas higher education is the apex level of learning towards achieving life goals. To bring harmony at both levels, it is essential to comprehend the concept of inclusive education, status of inclusive education in Pakistan, understanding the barriers & their solutions and future of inclusive education in Pakistan, especially at higher education level for students with visual impairment. This document will reveal all the above-mentioned aspects in detail below.

2.1 Understanding the inclusive education

Inclusive education is defined as all students (students with disabilities and students without disabilities) learning together in an institute that accepts and acknowledges the diverse needs of students to ensure the quality of education for all through appropriate curricula, organisation, teaching strategies and resources used to overcome barriers to the presence, participation and achievement of all students in general education [1].

According to the parent's perspectives [2], they discovered that commonly developing students educated in inclusive education programmes with students with special education needs would increase respect, awareness and acceptance of their peers' needs, develop fewer prejudices and learn to be more helpful and supportive towards people with disabilities, according to parent's perspectives. It is compatible that inclusive education plays a role in challenging disabling attitudes by changing

non-disabled students' attitudes towards disabled people; however, it contributes to the development of a more inclusive society [3].

Smogorzewska et al. [4] define the need for a greater understanding of diversity, tolerance, acceptance of others and the use of prosocial behaviour in an inclusive classroom to promote development. Other studies had looked into the effect of academic learning. However, according to some studies, the presence of special education students in regular education classrooms is associated with slightly lower performance of other students who do not have special education needs [5].

Group work in colleges or universities in the form of communities of mutual learners allows for a balance of individuality and group effectiveness, ensuring that everyone progresses according to their ability and allowing all students 'to enter the culture with awareness of what it is about and what one does to cope with it as a participant'. Interactive learning spaces, particularly those mediated by dialogue, promote collective thinking and learning, improve academic achievement, social skills and social cohesion, and are especially beneficial to vulnerable student groups [6, 7]. As a result, promoting such interactive and dialogic learning environments would help to achieve the goals of inclusive education.

The United Nations passed a convention on the rights of persons with disabilities, abbreviated as (CRPD), which states that persons with disabilities and corresponding special education needs (SEN) should be educated in the general education system alongside students who are not disabled and that disabled candidates should not be excluded from the classroom due to their disabilities. The Convention on the Rights of Persons with Disabilities (CRPD) established a human right for participation of people who are disabled and have special education needs, and it states that all people, regardless of their characteristics, must be treated equally. The Convention on the Rights of Persons with Disabilities (CRPD) provided impetus for many countries to establish an inclusive education system in which students with and without disabilities learn and think together. Previously, students with special needs were primarily taught in separate classrooms and segregated settings.

The central theme of inclusive education is based on the education of a specific group of students with special education needs (SEN) in order to control special education customs that have traditionally segregated students based on a medical model of disability [8].

A substantial amount of research has been conducted to justify that inclusion from both the educational and social perspectives, due to the proven positive effects of educational inclusion on the academic outcomes of students with disabilities, as well as its positive impact on the subsequent social inclusion of people with disabilities in terms of additional academic opportunities and qualifications, access to employment and the development of personal relationships within the community. Because inclusive education entails educating everyone, it is critical to consider all of the potential benefits of inclusion for all students. Furthermore, the fact that most research on inclusive education has focused on specific groups of students, particularly those with disabilities and other special education needs, may cause us to overlook other effects on other groups of students and may be inconsistent with a definition of inclusive education that is geared towards all learners [9].

Inclusive education relies on educators at all levels of the system being committed to and willing to implement its underlying philosophy. This means that educational systems and higher education institutions must articulate an inclusive culture in which 'some degree of consensus... exists... around values of respect for difference and a commitment to providing all pupils with access to learning opportunities'

[10]. Some argue that the core concept of inclusion only applies to certain groups or categories of people, whereas others argue that inclusion applies to everyone.

Inclusion does not only refer to diversity of ability; it also refers to other differences such as gender and cultural background, as well as the methods used to institute structure and address these differences [11]. Nonetheless, the concept has political implications. The concept of inclusive education is broad and complex, but it is ambiguous.

2.2 Understanding students with visual impairment and their needs in higher education

Visual impairment is a sight problem that interferes with a student's academic goals. The official description given by the Individuals with Disabilities Education Act is 'an impairment in vision that, even with treatment, significantly impacts a child's educational achievement' (IDEA). The word covers both limited vision and blindness.

A student with a visual impairment can succeed in higher education institutions if the necessary accommodations and assistance are offered. In order to sparkle the student's ability to succeed in the classroom, it may be more significant than their legal or medical classification, educators frequently define pupils with visual impairments in terms of classroom functioning. Moderate, severe and profound visual impairments are the most prevalent levels in educational settings. These categories show the extent to which a student needs special education modifications in order to learn.

The objectives for teaching visually impaired pupils have been addressed and frequently adjusted as knowledge of the effects of the impairment on education has evolved.

3. Importance of higher education for visually impaired

In today's scenario, students with visual impairment who want to succeed in higher education institutions must be able to deal with impairment-related academic difficulties. In this regard, students need to be aware of their disabilities, develop effective coping strategies to manage them, accept the advantages and disadvantages that come with them and be aware of the policies and support that are available.

Students with visual impairment may have some special educational needs that make it harder for them to access educational materials in the same way as their peers. However, this should not be interpreted as implying that individuals with special education needs cannot find alternative means of attaining the same level of education as others, nor should it be construed as implying that disabled individuals with the same type of disability can follow the same learning strategy.

3.1 Potential needs

The needs of international students can be divided into two categories, that is, personal and educational.

3.1.1 Personal needs

When they have 'personal needs', many VI students receive assistance from their home countries' families, friends and relatives. As a result, having a personal support

worker would be unusual in many cultures because receiving this kind of assistance is considered commonplace. However, moving to a new country and taking a lot of classes at the university might mean that the VI student needs help with their personal needs. However, universities are unlikely to be able to assist with this because it does not fall under the category of educational requirements. What personal needs may include: A VI person may require assistance in several areas. This is contingent on each learner's requirements and sight level, which are as follows:

- a. In the place where you live: washing, ironing, filling out paperwork, cleaning, reading letters, cooking, and so on.
- b. Independent living and mobility: Familiarity with the most important areas surrounding the residence; assistance from a walking assistant when going to places like the supermarket, tube station, chemist, bank, post office, park, gym, etc.
- c. Mode of transport: Familiarity with the local taxi and/or public transportation systems.
- d. Medical services: Registering with a local doctor or general practitioner (GP). Accessing information about the National Health Service (NHS) and how the system works.

3.1.2 Educational needs

Universities of college must comply with the equality by treating all students equally, regardless of where they come from. Therefore, universities must make reasonable adjustments to their facilities to meet the requirements of disabled students. Human, practical and logistical categories of facilities exist, and these should be identified during the previously mentioned study needs assessment. The following should be the areas of focus for educational institutions to support the inclusion and equality of visually impaired students:

- a. Familiarity with the routes to and from the university (mobility and orientation training);
- b. Access to library resources;
- c. Access to any course study materials;
- d. Access to a computer and the internet;
- e. Walking assistance for educational-related matters;
- f. Note-taking during lectures;
- g. Assistance with the visual aspects of the study (translating or explaining graphics, charts, images, etc.);
- h. Travel to and from the place of study;

- i. Access to the educational facilities that are accessible to people with disabilities; and
- j. Access arrangements for exams and extensions of deadlines. VI students need to have certain skills to manage the demands of higher education. Some examples include Skills in ICT, time management, organisation and communication, as well as a respectable degree of independence, which are all necessary.

Higher education is necessary for visually impaired students to fully develop their abilities and minimise the effects of their disability. This stands out and challenges the scepticism that some people have about the abilities of people with visual impairments.

4. Status of inclusive education at the higher education level in Pakistan

In Pakistan, inclusive education is still in its early stages, but several institutions are beginning to offer this type of education. The government is also working on developing policies and initiatives to promote inclusive education. While there are challenges that need to be addressed to make inclusive education more widely available, the potential benefits make it worth pursuing.

4.1 Commitment of Pakistan towards inclusive education

Inclusive education (IE) has been appearing as a significant theme in global educational policy, being a central component of the Sustainable Development Goals (SDGs). As a signatory to SDGs 2030, Pakistan has committed to IE since SDG 4 is fundamentally based on inclusionary education principles: 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. This goal aligns with articles 25 (Equality of all citizens) and 25-A (Right to Education) of the Constitution of Pakistan; Article 25 secures that all citizens are equal while Article 25-A guarantees that all students between the ages of 5–16 years old are provided with their fundamental right to education. The provincial education laws/acts correspond with these constitutional standards throughout all organs of the state. The education acts for Sindh, Punjab, and Khyber Pukhtonkhah Khah (KPK), clearly state that education facilities should not be segregated or denied to any child, and they forbid the exclusion of students from 'disadvantaged' backgrounds.

Along with the Balochistan Education Sector Plan 2013–2018 and the Punjab ECE Policy 2017, inclusive education is partially specified in the draught National Education Policy 2017 (which the current administration has unrestrained and is no longer applicable).

While these documents refer to inclusive education as avoidance of discrimination based on gender, abilities, cultural/ethnic and socio-economic backgrounds, they do not provide details on what the terms 'inclusion' and/or 'inclusive education' mean.

4.1.1 Provincial education

Although inclusive education is mentioned in the provincial education sector plans of Punjab (2013–2017) and Sindh (2014–2018), it is mentioned concerning students with disabilities and a shift from 'special' to inclusive institutes. Despite using the term 'inclusive education', no clear definition has been provided for it in these

documents. Despite this lack of a formal definition, efforts have been undertaken to encourage inclusionary practices in Pakistan's educational institutions. All major political parties have incorporated reference to inclusive education (IE) for persons with disabilities in their electoral manifestos for General Elections 2018. In addition, investments have been made to support special education systems within the country.

4.2 Laws, plans, and policies

The National Education Policy 2017 also highlights the importance of inclusive education and gender equity in education among its goals. In addition to laws on education, there are also specific laws and policies at the national level for different vulnerable groups that promote inclusion.

According to Ref. [12], the Higher Education Commission ("HEC") is dedicated to the goal that no one in Pakistan should be denied access to higher education, which includes making sure that those with disabilities have equal access to and opportunities for higher education. This higher education institution's ("HEIs") policy for students with disabilities strives to:

- Develop an environment that is supportive of inclusive education in colleges and universities.
- Make it easier for students with disabilities to participate in all curricular and co-curricular activities.

5. Key challenges for inclusive education in Pakistan

The National Curriculum from 2006 is still being used in Pakistan despite the 18th Amendment's provincialization of education in that country in 2010. Since this curriculum does not address the requirements of inclusive education, it is not included in the textbooks, learning materials, assessments or monitoring systems. Additionally, untrained staff and inadequate resources are considerable barriers to inclusive education. Although there is evidence of teachers displaying positive attitudes towards inclusivity in classrooms, they still lack training in methods of inclusive pedagogy.

One major obstacle to the inclusion of persons with disabilities (PWDs) in Pakistan is the lack of consistent, reliable and comprehensive data about various vulnerable groups. The 2017 Population Census, which was carried out after 19 years rather than the required decade, provided very insufficient and hurried information on PWDs that was hotly contested.

There are many accessibility challenges for students with vision impairment on university campuses in Pakistan. Due to accessibility barriers in the physical infrastructure, they are having difficulty entering a variety of locations, including libraries, classrooms, the ground and cafeterias. They are unable to view the notice board owing to a vision issue, therefore they are unable to learn about future activities.

They are unable to read the writing on the whiteboard, thus they cannot take adequate notes during class lectures. Handouts from the class are unavailable to them because they are not in an accessible format. Due to the lack of available associated assistive technologies, they are unable to look for relevant study material online to improve their learning capacity. These obstacles and constraints eventually lead these students to restrict their studies to mainly theoretical courses in the

arts. It prevents them from entering the science and technology fields. Additionally, negative attitudes are some of the biggest barriers for visually impaired students in inclusive education at the higher education level. Many people are unprepared to communicate with visually impaired students because of their visual impairment. They believe that blind students cannot function in an inclusive environment at a higher education level because they lack the necessary skills, knowledge, acceptance and capacities.

At the higher education level, the greatest hurdle is the presence of untrained teachers in inclusive settings. Because students with visual impairment differ from other students, untrained teachers do not know how to treat them. There are also different learning styles, which makes it difficult for teachers to adapt lectures to each student's needs because unskilled teachers are unable to comprehend each student's abilities, capabilities and learning styles. However, when given support, visually challenged students may accomplish anything.

5.1 Promising commitment of Pakistan

Pakistan made extremely poor progress towards putting the true principles of inclusive education into practice until the middle of the 1980s. The government started paying close attention to the preparations for the education of the differently abled persons after the UN declared a ten-year special focus on individuals with disabilities in terms of their quality education, inclusion and rehabilitation between 1983 and 1992.

Pakistan has recognised its duty to offer its citizens an inclusive education free from all forms of discrimination as a signatory to all key human rights conventions, accords and treaties as the UNCRPD [13] and the Salamanca Declaration [14]. Despite this declaration and the commitments made in the province's special education programmes in the wake of the 18th amendment to the constitution, the inclusion of visually impaired students in mainstream institutions remains a pipe dream. These pupils are not anticipated to achieve their best in all areas of learning due to the inaccessibility of the study materials and the improper setup of the assistive technology.

6. Higher education and inclusive programme

Because of this disability, visually impaired students rely heavily on the helper's skills. If their writing assistance is slow, they will need to make their description and explanation of their responses shorter. When it comes to conducting needs evaluations for the plans for inclusive programmes for students who are blind or visually impaired, higher education institutions in Pakistan are falling behind. They also lack the strong linkages to other state institutions needed to get policies that are based on reality and implement them fully. On the other hand, there is no solid working connection between the HEC, the ministry of education, and the institutions to execute inclusion by international agreements.

In industrialised countries, the majority of study disciplines have been made accessible for visually impaired students through the use of information and communication technology and other assistive equipment, but Pakistani universities are just starting to set up these resources.

Access to course materials is made difficult for visually impaired students at Pakistani universities by a number of factors [15]. Unfortunately, Pakistani schools for visually impaired students face a number of challenges and cultural barriers [16].

6.1 Accessibility hurdles and subject choice

Hussain et al. [17] reported that 17% of them were studying political science, 8% were studying history, 7% were studying education, 5% were studying psychology, 5% were studying special education, and 5% were studying mathematics. Of those, 19% were studying Urdu literature, 19% were studying English literature, 19% were studying political science, and 8% were studying history. However, due to accessibility issues, none of them was pursuing studies in any natural discipline, including physics, chemistry, biology, computer science or mathematics.

6.2 Accessibility hurdle at campus infrastructure

The obstacles to accessibility: There are no accessible campus buildings, no accessible writing boards, no accessible reading materials, no accessible assistive technology and no accessible science subjects. Visually impaired students frequently mentioned that finding their classroom, library and cafeteria can be challenging. Their teachers usually become enraged when they arrive late for important lectures. In addition, they reported encountering numerous obstacles when searching for their classes on other upper floors. According to the visually impaired students, the university administration did not have a proper method for informing the blind students about any new construction that had begun on the campus. They had to overcome numerous obstacles to access their classrooms and move around the campus as a result of this unplanned activity. In addition, female visually impaired university students found campus accessibility to be a greater obstacle. They face numerous mobility issues on campus as a result of cultural and religious constraints. If a male visually impaired student needs to go somewhere, he can ask anyone who is passing by, but if a female visually impaired student needs to go there, she cannot ask a man for help.

6.3 Notice board accessibility hurdles

Visually impaired students frequently miss events without access to notice boards, and they are unable to take advantage of various opportunities for self-grooming by participating in various competitions like poetry competitions, writing competitions, debates, speeches and other similar events for gaining confidence. The announcements for various events that are regularly placed on the campus notice board are inaccessible to students with visual impairments.

6.4 Writing board accessibility hurdles

The majority of higher education institutions serve students with visual impairments who are unable to independently take notes during lectures in the classroom. They must ask their blind classmates to read aloud what their teacher has written on the board or whiteboard in class. It might be highly embarrassing for them when they annoy their sighted peers by interfering with their note-taking activities. Students with visual impairments feel at ease with teachers who write on the board while speaking. While the majority of visually impaired students normally hesitate, some of them are brave enough to ask their teacher to read what they wrote. Asking the teacher to read aloud what is being written on the whiteboard is necessary. Some teachers only write; sighted pupils can readily see and take notes on the whiteboard when this is the case.

Only a small number of visually challenged students have access to braille literature. Braille textbooks for higher education and screen displays are uncommon in Pakistan's higher education institutions.

6.4.1 Efforts at higher education

Higher education is a social process that involves a lot of interaction and aims to teach specific cognitive skills and provide relevant information. The learner's ability to interact with teachers, other students and higher education institutes administrators, as well as access information, is crucial to its outcome. For visually impaired students, current higher education practices are extremely detrimental on both counts.

Academic library staff struggles to use assistive technologies and tools and provide services to people with visual impairments due in large part to a lack of training. It was discovered that numerous devices have been developed but have not been tested on visually impaired users. Students with visual impairments have difficulty accessing information because it is not available in appropriate formats.

Readers and encoders services pose challenges for visually impaired students due to the reader's inability to read smoothly and clearly. In addition, visually impaired students may not always be able to correctly pronounce unfamiliar terms in readers. Students with print disabilities face major obstacles due to the arrangement of the exam environment and the examiner's inability to manage it. Because there are no public transportation options on campus, these students have trouble getting to and from classes. People with visual impairments primarily use their hands to identify their surroundings and use a cane to touch objects.

Students with visual impairments lacked support from teachers.

Teachers' primary emphasis on support was on receiving sufficient training in teaching, assisting and accommodating students with visual impairments. The classrooms in Pakistan are designed for sighted students, so students with visual impairments are not getting the specialised attention they needed to meet their visual needs.

Toilets, water, sound, ventilation, power, the library, computer rooms and the cafeteria are all very limited in their availability and accessibility. Classrooms are not attractively decorated. As a result, the institute's environmental conditions are not inclusive. Students with disabilities, like visual impairments, were not taken into account when designing the curriculum. As a result, instructional materials that were based on an inclusive curriculum were not prepared for students with visual impairments. Although the majority of teachers claimed to have modified the curriculum, no teachers from either higher education institutes were observed to have modified the curriculum to meet the curricular requirements of their students.

In addition, urban and rural institutes do not fully accommodate students with low vision in terms of social and academic accommodations, resulting in negative social and academic experiences for these students. In institutes, students with low vision are not adequately socially and academically supported, which contributed to their social and academic performance gaps.

6.5 Initiative towards inclusive education

In order to improve pre-service and in-service training, the National Plan of Action on EFA calls for developing teachers' ability for learner-centred pedagogies. Through a needs analysis to identify key development areas, such as management and administration, data collection and the information system, monitoring and

evaluation, assessment and supporting the professional development of teachers, the education for all (EFA) plan of the Government of Baluchistan aims to improve the technical capacity of provincial and district education departments in governance.

Building education departments' capacity to promote inclusive education methods at a higher level was not mentioned. The National Curriculum Framework (NCF) outlines principles for instructional approaches that can meet the various learning requirements of pupils, including those who have impairments. The national curriculum framework includes a section on effective teaching and offers recommendations for various teaching and learning strategies that can better meet the needs of all learners, including those of students with disabilities. The framework articulates nine standards that describe what is expected of instructors. By describing the knowledge, attitudes and practises of instructors supporting the learning of students from varied backgrounds, including those with visual impairment, the standards promote disability-inclusive education.

- Subject-matter expertise: This involves a dedication to 'using multiple techniques to convey knowledge to learners', having high standards for every student, and delivering lessons that are pertinent to the circumstances in which the students find themselves right now.
- Understanding the context and background of students; how students learn as it relates to their developmental stage; knowledge of students' needs regarding their 'learning styles, disabilities and special needs, cultural and socioemotional differences, special medical, physical or emotional challenges', and how to engage and support them through the teaching and learning process; inspiring higher level students to assist.

7. Solution for removing barriers in inclusive setup at higher education level for visually impaired students

For students who are visually impaired, blindness is a challenge. Without any help, they are helpless. They have always needed assistance if there are no accommodations that meet their needs. They are always reliant on someone else. They desire to live freely, yet their impairment prevents them from doing so. We must remove their obstacles in higher education so they can progress further in life. However, for this, a focus on teachers and higher education will be crucial.

If we initially acknowledge the vulnerability of visually impaired students, attitude challenges can be removed. Accept them, and instead of making fun of them, inspire them to take action on their own.

Furthermore, qualified and trained teachers are required for inclusive settings at the higher education level for visually impaired students since they are aware of their requirements and are capable of explaining the lecture to visually impaired students. Teachers with training understand their needs and pedagogy. Training gives teachers the best way to distribute materials. Alternative media, such as audiotapes, Braille prints, electronic text, tactile drawings and aural descriptions, can help students with visual impairment get over these difficulties. Audiobooks can be used by students who have visual impairments to facilitate effective text reading.

Provide visually impaired students with assistive gadgets and technology for their convenience, such as closed circuit TV, screen migration or screen reading software,

to enable them to read and write at a higher academic level than the majority of students.

- Use inclusive technology, such as camera scanners and screen readers, for students who are blind or have other vision impairments.
- Daisy Player, an app for smartphones that performs text detection, OCR and text-to-speech.

The following are some ways to lessen the barrier for blind students in settings that are inclusive at the higher education level:

- Notepads and screens for Braille
- Screen enlargement; graphics and mathematical tools; NVDA and JAWS software
- Text-to-speech devices are electronic devices for reducing obstacles at the higher education level in an inclusive environment using this text-to-speech software, which can assist those who are blind or visually impaired in reading scanned printed material.

8. Future of inclusive set-up at higher education level for visually impaired students in Pakistan

An inclusive setup for visually impaired students in Pakistan seems not to have very bright future as in the last five years there were many policies and laws formed but unfortunately, there is no implication on any of those laws or policies. This is a sensitive part for our youth and the policies made for it should be direct in practice for the future of the state and the youth. However, some institutes are trying to implement the policies in their institution.

According to the national policy document, Pakistan has improved on a number of education-related metrics in recent years. However, there are two major issues with education in Pakistan: access to educational opportunities is still limited at all levels and the quality of education is subpar both in relation to Pakistan's goals and to international benchmarks. Pakistan recognises the equal human rights of people with disabilities as an Islamic country. Islam recognises the significance of people with disabilities and acknowledges their significant role in society's economic, social and national rights. It may be assumed that aspiring instructors from Pakistan have a strong spiritual stance to meet the demands of exceptional students. They act in a more effective manner to push the inclusive education idea into higher education [18].

It is also one of the realities behind this that Pakistan is an underdeveloped country and it works day and night to reach the sky with all other aspects. The time will come when Pakistan will be working hard to improve its education system. Pakistan has initiated the step as the father of nation said 'work, work, and work and we are bound to success'.

Pakistan is using positive and innovative approaches to transition to inclusion. The state has a larger responsibility to promote inclusive education by removing barriers for students with visual impairment at higher education levels.

There are various plans that are having the ideas to build accessible infrastructure: provision free assistive technologies, provision assistive devices and their maintenance and most importantly a friendly environment for learning.

Teachers with adequate professional training and trained supporting staff in the colleges or universities of Pakistan are part of firm future planning for inclusive education at the higher education level. Such initiatives will also be supported by non-governmental organisations (NGOs), governmental organisations or semi-governmental organisations, including autonomous bodies and other departments, that will support such a marvellous system of education to encourage students with visual impairment at higher education levels.

Although policies and laws are already there, the time is to implement them properly and get the appropriate set result, which was planned already while making the legislation.

The need is only to change the mindset and increase the level of awareness about students with visual impairment to make them assets for the nation.

9. Conclusion

There are many obstacles to inclusive education policymaking in Pakistan, such as ambiguous definitions, a lack of systems thinking, a lack of official categories for vulnerable groups, limitations due to cultural and economic factors and a lack of awareness of vulnerable groups. However, many of these issues can be resolved by conducting studies, passing laws and formulating policies. In Pakistan, the conversation about inclusive education is growing, which raises the prospect of future policies that are even more inclusive. However, it is hoped that future is very bright for inclusive education in Pakistan.

10. Recommendations from the chapter

The following points are strongly recommended to improve the inclusive education system in Pakistan for students with visual impairment at higher education levels:

- The entire communication should be managed through E-resources like institutional websites, E-mail services, SMS and audio messaging so that visually impaired students do not miss any important notifications.
- The campus buildings should be made as accessible as possible while keeping in mind the universal design of infrastructure.
- Teachers should receive education and training on how to interact with both sighted and visually impaired students. They should read the entire lecture point once they have finished writing it on the whiteboard in addition to speaking while writing on it.
- A braille embosser should be purchased by each university library service or resource centre in order to close the accessibility gap for reading materials. Additionally, each library should have two braille screen displays that can display

the most characters possible in order to support quick and temporary reading. The doors to the natural sciences will be opened.

- Commonly used assistive technologies, such as reading aids and navigational aids, shall be available in every higher education institution in order to uphold the inclusiveness of visually impaired students.
- The Higher Education Commission (HEC) should step forward to support such projects.
- Institutions of higher education should advance their research in the area of comparative education and investigate the accessibility methods of teaching mathematics and natural science to visually challenged students around the world.

Acknowledgements

I am grateful to Almighty Allah, lord of the universe and source of wisdom and guidance, who enable us to complete this chapter. With all respect to his Holy Prophet Muhammad (PBUM) who brought the light of knowledge when humanity was wandering in the desert of ignorance.

I am grateful to Dr. Samina Ashraf for her attitude; suggestions, sincere authorship, guidance and kind help during this chapter. I am humbly thankful to my dearest parents and family members who are very generously provided me with every facility at every stage of my life and make it possible for me to complete this chapter.

I am also very grateful to Sara Debeuc for her true professional attitude and for providing me with such a wonderful opportunity and bearing my numerous questions.

Conflict of interest

The authors declare no conflict of interest.

IntechOpen

Author details


Kashif Iqbal^{1,2*} and Samina Ashraf¹

1 Institute of Special Education, University of Punjab, Lahore, Pakistan

2 Government Training College for the Teachers of Blind, Lahore, Pakistan

*Address all correspondence to: kashif.iqbal.tsa@gmail.com

IntechOpen

© 2022 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. 

References

- [1] UNESCO. A Guide for Ensuring Inclusion and Equity in Education. Paris: UNESCO; 2017
- [2] Tafa E, Manolitsis G. Attitudes of Greek parents of typically developing kindergarten students towards inclusive education. *European Journal of Special Needs Education*. 2003;**18**:155-171. DOI: 10.1080/0885625032000078952
- [3] Grütter J, Gasser L, Malti T. The role of cross-group friendship and emotions in adolescents' attitudes towards inclusion. *Research in Developmental Disabilities*. 2019;**62**:137-147. DOI: 10.1016/j.ridd.2017.01.004
- [4] Smogorzewska J, Szumski G, Grygiel P. Theory of mind goes to school: Does the educational environment influence the development of the theory of mind in middle childhood? *PLoS One*. 2020;**15**:e0237524. DOI: 10.1371/journal.pone.0237524
- [5] Hienonen N, Lintuvuori M, Jahnukainen M, Hotulainen R, Vainikainen MP. The effect of class composition on cross-curricular competencies—Students with special educational needs in regular classes in lower secondary education. *Learning and Instruction*. 2018;**58**:80-87. DOI: 10.1016/j.learninstruc.2018.05.005
- [6] Fernández-Villardón A, Álvarez P, Ugalde L, Tellado I. Fostering the social development of students with special educational needs or disabilities (send) through dialogue and interaction: A literature review. *Social Science*. 2020;**9**:97. DOI: 10.3390/socsci9060097
- [7] García-Carrión R, López, de Aguilera G, Padrós M, Ramis-Salas M. Implications for the social impact of dialogic teaching and learning. *Frontiers in Psychology*. 2020;**11**:140
- [8] Kurth JA, Miller AL, Toews SG, Thompson JR, Cortés M, Dahal MH, et al. Inclusive education: Perspectives on implementation and practice from international experts. *Intellectual and Developmental Disabilities*. 2018;**56**:471-485
- [9] Messiou K. Research in the field of inclusive education: Time for a rethink? *Inclusive Education Journal*. 2017;**21**:146-159. DOI: 10.1080/13603116.2016
- [10] Ainscow M, Miles S. Making education for all inclusive: Where next? *Prospect: Quarterly Review of Comparative Education*. 2012;**38**(1):15-34
- [11] Sturm. Manzano-García and Tomé-Fernández Stress the Importance of Intercultural Values for Inclusive Education. *Sustainable Intercultural and Inclusive Education: Teachers' Efforts on Promoting a Combining Paradigm*; 2016
- [12] Higher Education Commission. Policy for Students with Disabilities at Higher Education Institutions in Pakistan. 2021
- [13] United Nations Convention on the Rights of Persons with Disabilities; 13 Dec 2006
- [14] The Salamanca statement and framework for action on special needs Education. UNESCO; 1994
- [15] Ahmad S, Yousaf M. Special education in Pakistan: In the perspectives of educational policies and plans. *Academic Research International*. 2011;**1**(2):228

[16] UNICEF. Inclusive education
| UNICEF. 2021. Available from:
[https://www.unicef.org/education/
inclusive-education](https://www.unicef.org/education/inclusive-education)

[17] Hussain F, Hameed A, Ashraf T.
Accessibility hurdles in inclusive
education of the visually challenged
students at university level in Pakistan.
Pakistan Social Sciences Review.
2022;**6**(2):458-467

[18] Shaukat S, Sharma U, Furlonger B.
Pakistani and Australian pre-service
teachers' attitudes and self-efficacy
towards inclusive education. Journal of
Behavioural Sciences. 2013;**23**(2)