'AN ASSESSMENT OF INCLUSIVITY IN SCHOOL EDUCATION FOR THE STUDENTS WITH HEARING IMPAIRMENT: A FIELD STUDY IN HARYANA'

Dissertation

SUBMITTED TO THE NATIONAL UNIVERSITY OF EDUCATIONAL PLANNING AND ADMINISTRATION, NEW DELHI IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

MASTER OF PHILOSOPHY
2020

(Preeti Sharma)

NATIONAL INSTITUTE OF EDUCATIONAL PLANNING AND ADMINISTRATION, NEW DELHI
MAY, 2020

DECLARATION BY THE SCHOLAR

This is to certify that the M.Phil. Dissertation being submitted by me on the topic entitled *'An assessment of inclusivity in school education for the students with hearing impairment: A field study in Haryana'* has been completed under the guidance of Prof. Veera Gupta It is declared that the present study has not previously formed the basis for the award of any Degree, Diploma, Associateship or Fellowship to this or any other University.

Scholar's Signature

(Preeti Sharma)

CERTIFICATE OF THE SUPERVISOR

This is to certify that the dissertation entitled *'An assessment of inclusivity in school education for the students with hearing impairment: A field study in Haryana'* is the work undertaken by Ms. Preeti Shrama under my supervision and guidance as part of her M.Phil. degree in this University. To the best of my knowledge, this is the original work conducted by her and the dissertation may be sent for evaluation.

Supervisor's Signature

(Prof. Veera Gupta)

Acknowledgements

I would like to express my sincere gratitude to my supervisor Professor Veera Gupta for her contribution in the completion of this challenging task. Her constant support and guidance proved to be indispensable in writing this Dissertation.

I am thankful to the administrative staff at the National Institute of Educational Administration and Planning (NIEPA) for being very helpful and more than responsive to the needs of the research scholars at the Institute.

I express my sincere thanks to the Director and the District Project Coordinator, Inclusive Education Department, Government of Haryana for providing requisite information for field surveys.

I owe my parents sincere gratitude for all their support over the years. I would like to thank friends who have helped me with their valuable suggestions and guidance has been helpful in various phases of the completion of the dissertation.

I have had great people in the journey of my life. I wish to thank each of them for their support and assistance.

CONTENTS

List of Tables

List of Figures

List of Boxes

ABBREVIATIONS & ACRONYMS

ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
ASHA	American Speech-Language Hearing Association
B.Ed.	Bachelor of Education
BRC	Block Resource Centre
BSL	British Sign Language
CSIE	Centre for Studies on Inclusive Education
CWSEN	Children With Special Educational Needs
CWSN	Children With Special Needs
DHH	Deaf and Hard of Hearing
FM	Frequency Modulation
FY	Financial Year
HI	Hearing Impaired
ICAQ	Inclusion for Children and Adolescents Questionnaire
ICT	Information and communications technology
IECYD	Inclusive Education for Children and Youth with Disabilities
IEDSS	Inclusive Education for Disabled at Secondary Stage
IEP	Individualized Education Plan (or Program)
IQ	Intelligence Quotient
JBT	Junior Basic Training
MCQ	Multiple Choice Question
MHRD	Ministry Human Resource Development
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NCTE	National Council for Teacher Education
NGO	Non-government Organization
NPPD	National Policy for Persons with Disabilities
PEI	Physical Efficiency Index
PwD	Persons with Disabilities
RCI	Rehabilitation Council of India

RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RPwD	Rights of Persons with Disabilities
RTE	Right to Education
SCERT	State Council of Educational Research and Training
SDG	Sustainable Development Goals
SSA	Samgra Shiksha Abhiyaan
UK	United Kingdom
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNO	United Nations Organisation
USA	United States of America

EXECUTIVE SUMMARY

Disability is present in every ethnicity, gender, age, and religion. More than a billion people, or 15 percent of the world's population, have some category of disability. Of these, an estimated 150 million children have a disability, and 80 percent of these children live in the developing world (World Health Organization, 2011). These children often face conditions of extreme poverty, exclusion, and discrimination and are denied the basic services offered to their peers without disabilities. The United Nations Children's Fund (UNICEF) estimates that 90 percent of children with disabilities in low-income countries have never received any form of education (UNICEF, 2014a). The chances of dropouts are comparatively very high among the enrolled students with disabilities than students without disabilities.

Hearing ability is critical to speech and language development, communication and learning. Hearing loss causes delays in the development of speech and language, and those delays in turn lead to learning problems, often resulting in poor school performance. Unfortunately, since poor academic performance is often accompanied by inattention and sometimes poor behavior, children with hearing loss are often misidentified as having learning disabilities such as ADD and ADHD.

According to the American Speech-Language Hearing Association (ASHA), children who have mild to moderate hearing loss but do not get intervention services are very likely to be behind their hearing peers by anywhere from one to four grade levels. And for those with more severe hearing loss, intervention services are even more crucial and those who do not receive intervention usually do not progress beyond the third-grade level.

What are the reasons behind this education gap? It is certainly not a question of intelligence. Just because a child has hearing loss, it doesn't mean he is any less capable of doing well in school than his hearing peers. Sometimes the classroom environment itself does not support a child with hearing loss. A busy teacher who has many students to attend to, or a teacher with a poor understanding of hearing loss, often is unable to alter his teaching style or keep a student's hearing loss in mind while teaching a lesson or assigning homework.

This research study provides policy suggestions for enhancing inclusive education system in India, especially for Hearing Impaired children, which is moving from a segregated system toward an inclusive system of education. The fundamental premise of this proposed research is that all children deserve the right to learn and reach their full potential. For many

children with disabilities, this means receiving specialized supports or special education to address their individual learning differences and needs. This research explores to discuss the supports that should be provided within an education system and provides suggestions on how to adjust education systems to attain improved learning outcomes for students with hearing disabilities.

A.   Rationale

The process of learning for hearing impaired students is not much different from other students. Nevertheless, such students face a number of challenges which normal students do not face. Students with hearing problem need specialized equipment and properly trained teachers to help in learning effectively. Communication plays a significant role in learning and therefore students with hearing loss suffer in their learning due to the communication problem. Lack of communication remains a major hindrance in their learning process. Apart from that, these students do not mix up well with other students. Their participation in the classroom discussions is highly restricted. Their problem is aggravated by the unavailability of necessary specialized equipments and specially trained teachers in the schools.

The children with special need suffer from many challenges in their day to day life. Government of India took many steps to resolve their problems by introducing policies for these children like IEDSS which was merged into RMSA and now RMSA is involved with Samgra Shiksha Abihyaan, enactment of RPwD Act 2016 etc, Rehabilitation Council of India, a Statutory Body, also mandated to regulate and monitor services given to persons with disability and to standardise the syllabi.

Children with hearing loss face challenges not only in communication but also in their social life and comparatively higher than other group of disable people because most of the hearing impaired children also suffer from speech impairment. Lack of communication makes them more prone to vulnerable condition. Our thinking process works as per the words generated in our mind. If someone has no knowledge of any alphabet then the process of thoughts also get affected by this disability. Apart from poor educational attainments and high social alienation, hearing ability also impacts the psychological aspect of the life of these students.

The role of the society is vital in everyone's life. Lack of awareness about the disabilities in our society makes the people with disability more vulnerable. The hearing impaired students, at their early stage when they fail to respond to any sound, are considered

as slow learners or even many times as mentally challenged. With the emergence of modern education system and enhanced level of literacy among people, our society has become little bit sympathetic towards them but sympathetic attitude of society towards the persons with disability does not resolve their daily life challenges.

The notion of inclusion imbibes the value of empathy for disabled people rather than sympathy. In this context, a school is considered as a mini society or institution for the overall development of the child. Every child has a baggage of values and thoughts which they carry from their environment. Teachers are also a part of society so their values and thoughts are also influenced by their surroundings. Overall, the school acts as a miniature of society which has its own thoughts and values. So, when we talk about the inclusive education for the hearing impaired students in any educational institution the notion of inclusivity is influenced by the thoughts of stakeholders.

A research study on Deaf Perspective in South Africa considered that hearing loss is not any kind of disability because we can overcome through this disability with the help of Sign Language (which does not require any word or language). Under this notion, if everyone has knowledge about sign language then the hearing impaired students shall consider themselves as the part of society.

The children with hearing disability suffer with intrinsic as well as external factors. Intrinsic factors include hearing loss and speech impairment while extrinsic factors may arise due to negative attitudes to and stereotyping of differences; an inflexible curriculum; inappropriate languages or language of learning and teaching; inappropriate communication; inaccessible and unsafe built environments; inappropriate and inadequate support services; inadequate policies and legislation; non recognition and non-involvement of parents; inadequately and inappropriately trained education managers and educators.

Available data reveals that, on an average, one in three children with disabilities at primary school age is out of school, compared with one in seven children without disabilities. Primary school completion is also lower for children with disabilities. These trends are also reflected in the lower literacy rate of persons with disabilities. Fifty four per cent of persons with disabilities compared to seventy seven per cent of persons without disabilities are literate (UNCRPD).

Persons with disability face many challenges in their academic and social life and that is the assumed reason for their higher dropout rate in comparison with other students. RPwD act mentions 21 types of disabilities and each disability has its own academic challenges. Our policies have several measures to facilitate the education of the children with special needs

but still prudent implementation of these policies at the ground level is a big challenge. So, inclusivity of children with special educational needs (CWSEN) in our inclusive education system should be evaluated from time to time. This research focuses on academic challenges known to us till date before the hearing impaired students. The reference region of the study is Haryana state.

B.   An Outline of the Chapters

This section provides a summary of the content to be covered in each chapter of this study.

Chapter One begins with the concept of symbolism which depicts how the surroundings of the people change their scenario for the world. This chapter explains the capability approach given by Amartya Sen with respect of the persons with disabilities. The theory reveals that the capability approach favors the end rather than the means.   The opportunities provided to the children with special needs play a very important role in their development. All the opportunities should not be counted only on success rate but on the efforts of the child must be appreciated whether the goal is achieved or not. This chapter explains how the hearing disability affect the children with hearing loss in multiple manner. The hearing loss affects their lives socially, psychologically and academically.

This chapter also explains about the institutional transcendental approach of our institutions. According to them the justice is imparted just by creating a court. The notion of reliance on agency is examined in this chapter. This chapter also deals with the clinical pathological model which explains the disability of hearing as a deficit and the other one is social cultural model which explains that the facilities provided to hearing disabled with right model. This chapter discusses about the existing policies for the inclusive education. Finally, the provisos of the RPwD Act, 2016 for hearing impaired student are also explained in this chapter.

Chapter Two begins with an overview of the inclusive education. After that the chapter explains the conceptual foundation of the inclusive education. The shift of mainstreaming to inclusion in education is explained with the help of different article reviews. The chapter tries to provide the essence of inclusivity, accessibility and challenges faced by the person with disability with the help of works of different authors on disability.

Chapter Three explains about the types of research methods used during the research work. The chapter begins with the brief details of data base collected for this study and

explains the instruments used for data collection. The chapter also explains the process of data collection in the field. The challenges which we faced during the field study are also mentioned in the chapter.

The chapter covers issues relating to the research design and methodology for this study and includes information on the differences between qualitative and quantitative research, data collection (including both primary and secondary data sources) data analysis, ethical considerations and the limitations of this study.

Chapter Four starts with the explanation of the questionnaire and the policies in the hindsight of which the questionnaire has been designed and questions have been structured.

Apart from that, this chapter also provides the findings of the field work in a thematic way. The findings are divided into five segments in which first one deals with the Teacher's role in the inclusivity in education for the hearing impaired students with the help of the Figures and Tables. Second, deals with the learning outcome of the students with hearing impairment as compared to other students and are shown with the help of Figures and Tables. Third section is the qualitative analysis, using Figures and Tables, of the teachers' responses as recorded in the questionnaire. Fourth section explains the case study of students observed during the field work. Fifth section deals with the policy analysis which is used to make recommendations for the children with hearing impairment.

Chapter Five collates information from the findings from the completed questionnaires, a discussion around these findings and a conclusion and summary of the research from which recommendations for further research and policy planning have been brought out.

<div align="center">

Chapter-One

INTRODUCTION

</div>

"Inclusive education can be seen as a process of strengthening the capacity of an education system to reach out to all learners" and "to respond to students'' diversity by increasing their participation and reducing exclusion within and from education" (UNESCO 2009).

A.   Theoretical and Conceptual Framework

The notion of disability is highly contentious. In fact, variation among disabled children with respect to their experiences and bodily conditions is at least as much as among children who lack disabilities. As far as deaf or hard of hearing students are concerned their disabilities are peculiar in nature. Hearing loss or impairment per se are not disabilities but their consequences makes an individual disable because their language skills fail to develop. The hard of hearing students or deaf which have no sound deal with the world of clamour. The important question which arises here is that we call them disable primarily because they are incapable of hearing the language of verbal communication which human beings have made for their convenience. Language is undoubtedly the basis of all the knowledge but the very basis mutates itself across the regions of the world that too for the convenience of the human beings. So, the disability of the hard of hearing and deaf children is a derived disability in that sense which emanates from their inability to develop their skills on the common language communication.

Plato's concept of 'Allegory of the Cave' depicts that the prisoners who live in the cave have no knowledge about the outer world. According to them, the shadow is the reality of their lives and the shadow creates different sound. Their world of shadow is totally different from the real world because they spent their lives in prison only with paltry light which showed them shadow only. The symbolism concept of Plato reveals that the darkness of the cave made the perception of the prisoners different from the real world. They do not have any exposure to the outer world of the cave. So their knowledge is built around their surroundings only. The world of shadow became the real world for them and the existence of the shadow with its sound became the truth of their life. Their ignorance due to their imprisonment in a

<div align="center">1</div>

dark cave haunts them from the real world. The real things (Sun) hurt the prisoners' eyes and they took time to adapt to that culture.

We can correlate the very concept of symbolism with the hard of hearing or deaf students. The analogy is that the hard of hearing or Deaf students live in a world which has no sound for them. Children who cannot hear face inescapable challenges in their life when they try to understand the world of clamour. Moving from the mute world to the world of sounds is very strenuous task for them. So, the unusual things are usual for them and to change that perception they need support and care to be comfortable in this usual world. Unfortunately, the study claims that ninety percent of the hard of hearing or deaf children are born in hearing families who have no knowledge about that kind of a child. Only ten percent of hearing impaired students are able to learn sign language and decipher their concepts in some manner. The hard of hearing or deaf children not only face the issue of language development but also they simultaneously face a big challenge in socio emotional development (Johnson, Liddell & Erting, 1989). The hearing capability only cannot support us to develop a language but a congenial social relationship within the society is also equally important. The hard of hearing students suffer with hearing loss as well as speech disability in most of the cases which make them vulnerable in many aspects:

- **Academically:** The ordinary classrooms indiscriminately use the normal pedagogy for all the students in which they feel neglected and detached due to lack of hearing ability. Mostly, teachers prefer lecture method to explain the concepts to the students and the hearing impaired students cannot understand the concepts due to the normal pedagogy of the teachers.

- **Socially**: Children with hearing loss also face challenges in their social life. People are comfortable to talk to those people who can understand them easily and can talk with them in their native language. Normal people avoid to conversate with the people with hearing impairment. Thus due to language constraints, children with hearing impairment remains alone, isolated and detached and they remain deprived of the benefit of social life for the long duration of their life time.

- **Emotionally:** Human thinking and emotions are also delved into an instrument which is known as language. The hearing and speech disability make the life of a hearing impaired student vulnerable. They cannot convey their emotions to others

and cannot feel the emotions of other people due to the language deficiency. Thus they remain emotionally disconnected from other people.

- **Co- Scholastic activity**: Along with the academic challenges the hearing impaired students also face hindrance in participating in the group activities due to their lack of hearing capability or language deficiency. A child with hearing impairment is unable to communicate with other students because the common linkage of language to transfer their messages to each another is asymmetric.

As said above due to the lack of language development HI children face many issues and miss opportunities in their lives as a consequence of which they remain ignorant about their potentials throughout their lives. Amartya Sen's Concept of Capability approach, wherein he talks about the capabilities and functioning of the individuals, leads towards the well being of individuals. His capability theory purports two normative claims. First, every individual has right to achieve well being and second one is to achieve that well being by providing her opportunities to enhance her capabilities. Sen's human development approach with the prospect of capabilities manifests that freedom to achieve the goals with an individual's own capacity and recognise her real potential helps her to lead an effective life.

Sen' capability approach is not limited to the well being of the individual through the capabilities only but it also takes care about the flexibility and multipurpose aspects of well being. According to Sen, each individual has her own potential to do anything. Therefore the capability approach focuses on the End rather the Mean. Every individual has different capacity to convert mean into the valuable opportunity and opportunity into the functionaries.

Sen's "Capability" does not refer exclusively to a person's abilities or other internal power but refers to an opportunity made feasible, and constrained by, both internal and external conversion factor. He consistently refuted predetermined concept of capabilities explained by the theorists without any general social discussion or public reasoning.

Sen's capability approach also explains about the inter-personal differences which are far reaching and significant. Individual differences are due to the different capabilities and their different ways to convert them into the opportunities which make every individual significant and follow a different path to achieve its well being.

Sen's capability approach does not completely agree with the Rawls theory of justice which maintains that the society needs an institutional set up to secure justice for the weaker sections. Sen argues that merely the emergence of institutions is not the authentic way to ensure justice to the vulnerable groups rather the weaker section should have agency to achieve that justice. In addition to that, the society will also be aware about their well being.

We can relate the concept of Sen with the hearing impaired students for the prospect of capabilities. The students have different capabilities but they do not have opportunities to achieve their best due to many reasons like medical, social, academic and most importantly their ignorance about the policies and schemes which are meant for their development.

Here, the institutions make policies for the hearing impaired students and implement them to some extent on the ground level. However, the awareness to take advantage from these policies is not spread across the society and not even among those who have right to avail these facilities. So, the formation of different

---

Box 1.1: How Hearing Works

The hearing pathway is divided into three sectors:

1. The outer ear which consists of the pinna, the ear canal and the eardrum.

2. The middle ear which consists of an filled cavity containing the Ossciles, which are three small bones, the malleus, incus and stapes.

3. The inner ear which consists of the cochleas – a bony spiral filled with special fluids and lined with tiny hair cells that connect to nerve endings.

- Sound waves travel along the ear canal and hit the eardrum, which transmits the vibrations to the ossicles.
- The last of these bones, the stapes, passes on these vibrations to the cochlea.
- In the cochlea, the cochlea fluid is set in motion. Tiny hair cells called cilia within the cochlea are then triggered by the displacement of the cochlea fluid, activating the auditory nerve and translating this movement into electrical signals.
- These electrical signals are then carried along the auditory nerve to the brain where they are interpreted as sound.

Source: Deafness.org.au

policies is not the only task of the institutions but also the implementation of those policies along with creating awareness among the stakeholders. Then only the role of the institution may actually be meaningful in providing opportunity to the hearing impaired students which in turn will help them acknowledge their capabilities and become a part of the well being society.

Sen's capability approach believes in normative and conceptual framework rather than being merely theoretical. A practical and comprehensive approach leads individuals towards their capabilities. Those capabilities help the individuals to convert the opportunity into functionaries. In well being society, where each person is considered as an end and preference given to the choice and freedom rather than achievements, one moves towards the opportunity for growing an individual in her own way.

> **Box 1.2 Hearing Loop**
>
> "A hearing loop (sometimes called an audio induction loop) is a special type of sound system for use by people with hearing aids. The hearing loop provides a magnetic, wireless signal that is picked up by the hearing aid when it is set to 'T' (Telecoil) setting.
>
> The hearing loop consists of a microphone to pick up the spoken word; an amplifier which processes the signal which is then sent through the final piece; the loop cable, a wire placed around the perimeter of a specific area i.e. a meeting room, a classroom, a service counter etc to act as an antenna that radiates the magnetic signal to the hearing aid."

There are various institutions which prepare policies for the inclusion and adopt various theories to make policies effective for the children with special needs. The inclusion of these students in the mainstream school education provide a way to them to communicate with the existing world and make comfortable for them to lead a good life. Various policies adopt different methods to construct a framework for the education of the children with special needs. In which, the paradigms to which people ascribe regarding deafness will influence the way they view, treat and educate Deaf learners. Due to this, it is important that we understand what different paradigms advocate in order to ensure that the one we follow in India, which promotes successful learning amongst Deaf learners, rather than one, which has the potential to create barriers to success.

Box 1.3: Types of Hearing Loss

Auditory Processing Disorders

Auditory Processing Disorders occur when the brain has problems processing the information contained in sound, such as understanding speech and working out where sounds are coming from.

Conductive Hearing Loss

Conductive Hearing Loss occurs when there is a problem with the Outer or Middle Ear which interferes with the passing sound to the Inner Ear. It can be caused by such things as too much earwax, Ear Infections, a punctured eardrum, a fluid build-up, or abnormal bone growth in the Middle Ear such as Otosclerosis. It is more common in children and indigenous populations.

Sensorineural Hearing Loss

Sensorineural Hearing Loss occurs when the hearing organ, the Cochlea, and/or the auditory nerve is damaged or malfunctions so it is unable to accurately send the electrical information to the brain. Sensorineural Hearing Loss is almost always permanent. It can be genetic or caused by the natural aging process, diseases, accidents or exposure to loud noises such as Noise-induced Hearing Loss and certain kinds of chemicals and medications. Auditory Neuropathy is another form where the nerves that carry sound information to the brain are damaged or malfunction.

Mixed Hearing Loss

A Mixed Hearing Loss occurs when both Conductive Hearing Loss and Sensorineural Hearing Loss are present. The sensorineural component is permanent, while the conductive component can either be permanent or temporary. For example, a Mixed Hearing Loss can occur when a person with Presbycusis also has an Ear Infection.

Source: https://hearnet.org.au/hearing-loss/types-of-hearing-loss

Figure 1.1: The Deafness Continuum

Õ Clinical-Pathological Paradigm   Socio-Cultural Paradigm Ö

Oralism	Total	Manualism
Framed within a Deficit Model and Discourse	Framed within a Chairty Model and Discourse	Framed within a Rights Model and Discourse
Educational Practices include: Speech production and lip-reading skills	Educational Practices include: Speech production, lip-reading skills, signed English and the use of gestures	Educational Practices are committed to the use of Sign Language Educational Practices
Promote the use of hearing aids, FM systems and cochlea implants	Promote the use of hearing aids, FM systems and cochlea implants	Promote the use of Sign Language and Deaf role models

Medical/Deficit Approach   Bilingual and Bicultural Approach

A.1   The Clinical Pathological Paradigm

The hearing impaired is considered as deficient person or can say so through negative precept. Basically, this model describes that the person with hearing loss is self responsible for adjusting in the society. This medical model promotes the use of assistive device to overcome with the hearing loss.

The Medical model perspective further presumes that a group of people with hearing impairment is 'doubly handicapped' as it sees that it is their hearing loss and communication problems which are behind the learning and psychological problems they face (Levine, 1965; Davis & Silverman, 1960). Because the deaf learners cant

not hear, the Medical model, sees them as disables and defines them as "a minority group composed of hearing impaired persons who are treated in certain negative ways by the hearing majority" (Baker-Shenk & Cokely, 1980:54).

Developing the speech with the use of hearing aid is the only basic goal of this approach wherein it is believed that communication skills are required for their integration into the hearing community. This approach is in sharp contrast with the followers of the Manual method of communication because they believe that once the Deaf learners acquire firm foundation in the Sign language then only they are prepared to be exposed to a written form of a spoken language through the Bilingual-Bicultural approach.

A.2   Social Cultural Model of Deafness

This model maintains that deafness is a language problem which we can overcome by the use of an alternative language (Sign Language). Within the paradigm of the socio-cultural model Deaf learners are considered as a part of the linguistic minority group and that the group share a strong identity, a unique culture (Deaf culture) and a common language (Sign language). The model further believes that the Deaf people are proud to be a part of the Deaf Community and they prefer to have for themselves an identity of a unique linguistic and cultural group. Like the various linguistic groups like the French, the Chinese, the Portuguese etcetera are identified as unique linguistic and cultural groups and named with an upper case alphabet, indicating the use of a proper noun for identification, the Deaf community also refer to itself with a capital letter 'D' to distinguish itself as a separate and unique linguistic and cultural group.

The Manalism approach advocates the use of a Sign language which is designed in the gestural/visual modality and which uses space rather than the sound generated using the upper part of the body including face and hands (Petitto, 1994; Bellugi, 1980; Klima & Bellugi, 1979; Stokoe, 1974). Similar to the socio-cultural paradigm, Manualism also can be placed on the opposite end of the pendulum of the communication approach/method. Manualism has evolved within the socio-cultural paradigm whereas Oralism has its roots in the clinical-pathological paradigm.

Socio-cultural paradigm of deafness and its followers go beyond the narrow view of human communication capability. The see that language communication is not mere a physical act but it arises in the brain and can be expressed by humans in more than one modality. Physical impairment cannot confine the language capability

of human. On the basis of this premise it can be said that the communication capability of the Deaf learners through sign language will ensure them equal access to learning as the hearing learners get in their spoken language.

Sign language as a means of instruction has received support from a number of researchers. They claim that Sign language can be used as a medium of instruction from birth to the tertiary-level (Petitto, 1994; Klima & Bellugi, 1979, Stokoe, 1974). Evidence from linguistic research demonstrate that Sign languages are full-fledged means of communication wholly capable of communicating all the nuances of meaning which any spoken language can express. (Bellugi, 1989; Petitto, 1984; Aarons & Akach, 1999:8).

A.3   Total Communication

The philosophical premise of the Total Communication approach is that it uses every possible means and modality to educate Deaf learners. It delves into the possibility of using a host of methods such as finger spelling (the Sign Language alphabet), writing, mime, lip-reading, gestures, pictures and oral speech. It vehemently encourages the use of residual hearing via amplification such as cochlea implants, hearing aids, and FM systems.

Educators using the Total Communication as a means of teaching instructions to impart education to the Deaf may find that either their speech, form of signing or both deteriorate over time. Therefore, as a weakness of the Sign language, one cannot speak and sign at the same time. The root of the problem is that the two forms of communication have two very different language structures which may cause the Deaf learners to experience barriers inappropriate language or language of teaching and learning and inappropriate communication in the schools which are using Total Communication (Department of Education, 2001:7 & 18). After the realisation of the limitation of the Total Communication that it resulted in Deaf learners being unable to communicate adequately with either hearing people or Deaf led to the adoption of the Bilingual Bicultural approach in education. (Smuts, 2002:54).

A.4   Bilingual-Bicultural Model

From the limitations of both the Oralism and the Total Communication came the development of the Bilingual-Bicultural approach as a means of promoting literacy development among Deaf learners through respecting and using "both the Sign Language of the Deaf community and the spoken/written language of the hearing community" (Gregory, 1998:64). In this approach, the primary medium of instruction

is Sign Language and learners are introduced through Sign Language to literacy in the written (second) language. With the concept of a first language in place, a Deaf child is now able to 'hang' and "attach the new information to existing understanding" (Komesaroff, 1996:41). Not only does this model acknowledge Sign Language as the first language of the Deaf, but it also recognizes the importance of the Deaf community and Deaf Culture (Storbeck, 2000:52; Ewoldt, 1996; Sacks, 1991:150).

The Bilingual-Bicultural Model can be seen to have its roots in the socio-cultural paradigm as those adopting this model see Deaf people as belonging to a minority group with its own language and culture and thus use their language, Sign Language. If Deaf learners are educated by educators using this model, they will be able to adapt to interact with both the Deaf and hearing communities (UNESCO, 1999). Then the barriers inappropriate languages or language of learning and teaching; inappropriate communication and negative attitudes to and stereotyping of difference and inadequately and inappropriately trained education managers and educators (Department of Education, 2001:7 & 18) will not be experienced by Deaf learners in schools for the Deaf. This will be because educators will use Sign Language for all teaching, learning and communication and will view deafness from the socio-cultural paradigm and thus expect the same outcomes from their Deaf learners as they do from hearing learners.

B.   Existing Policies in India for Inclusive Education

Several government policies are in place to ensure the inclusive education for the children with special needs and to provide realistic view to the existing government policies their rights must be ensured under these policies. In the new nuisance, *Samgraha Shiksha Abhiyaan* is a major and very important policy document for inclusive education which includes *Sarva shiksha Abhiyaan*, *Rashtriya Madhymik Shiksha Abhiyaan* and Teacher Education in one single draft.

The SSA draft provides a holistic view of our education system and its processes. The draft envisages the quality of Indian education system to improve and provides a single platform to students to complete their school education at one stance. The SSA includes the provisions of the RPwD Act in the draft for the children with special needs. The RPwD Act explains the duty of the State and enunciates

various provisions to support the education of children with special needs in its Chapter three.

B.1 Right of Persons with Disability Act, 2016

The RPwD Act, 2016 fulfils the obligations of the United National Convention on the Rights of Persons with Disabilities (UNCRPD), 2006. According to this act, the governments have duty to fund for the educational system to promote the inclusion in the schools.

B.1.1 Section 16 of the RPwD Act, 2016

Section 16 says that the appropriate Government and the local authorities shall endeavour that all educational institutions funded or recognised by them provide inclusive education to the children with disabilities and towards that end shall:

i.   Ensure that the education to persons who are blind or deaf or both is imparted in the most appropriate languages and modes and means of communication.

ii.   The students having hearing impairment have right to learn the concepts and acquire knowledge in which he/she can easily understand (Sign Language). This proviso of the Act avails them right to learn communication skills and modes through which they can express their views to others and vice versa.

iii.   Provide necessary support individualised or otherwise in environments that maximise academic and social development consistent with the goal of full inclusion.

The students with hearing impairment have right to participate in group activities and remain comfortable with their peer groups. Individual difference should be take care by the teachers as well as the administration of the school. Full inclusion is feasible when the other students understand that the children with special needs have right to lead a same life as they have. The notion of sympathy changed into the approach of empathy is the base for full inclusion for the children with special needs.

B.1.2 Section 17 of the RPwD Act, 2016

The appropriate Government and the local authorities shall take the following measures for the purpose of section 16, namely:—

i.   *'To train and employ teachers, including teachers with disability who are qualified in Sign Language and Braille and also teachers who are trained in teaching children with intellectual disability.'*

Teachers plays very significant role in the accomplishments of the students. An efficient teacher can acknowledge children's efficiency and motivate them to progress according to their capabilities. The trained teachers deal with the students more comfortably and provide them a progressive environment to enhance their skills and qualities.

ii. *'To promote the use of appropriate augmentative and alternative modes including means and formats of communication, Braille and Sign Language to supplement the use of one's own speech to fulfil the daily communication needs of persons with speech, communication or language disabilities and to enable them to participate and contribute to their community and society.'*

As many studies suggested that the students with hearing impairment not only have language impairment but have an issue with speech also. So, the education not only imparts the content knowledge but also empowers them to build a social relationship. Apart from that quality of team work also develops within the students during the school period. The hearing impaired student have right to develop social relationship with their classmates and others. For this pursuit, the teacher should provide them appropriate environment according to the needs of the students.

iii. *'To provide books, other learning materials and appropriate assistive devices to students with benchmark disabilities free of cost up to the age of eighteen years.'*

The hearing impaired students need hearing aids to listen the content in the classroom only if their hearing ability can be assisted with that aid. Information and communication technology also plays a very significant role in the understanding of the hearing impaired students because they can easily understand the content by visualizing it. The energised books will also become a boon for such students because they will easily avail the content in graphics form.

iv. *'To make suitable modifications in the curriculum and examination system to meet the needs of students with disabilities such as extra time for completion of examination paper, facility of scribe or amanuensis, exemption from second and third language courses.'*

As the students of hearing impairment face many challenges at the same time so they have a choice to study that subjects which they can easily understand

12

and have opportunity to compete with their own inherent potential. The curriculum can be modified as per the non-scholastic activities and the teacher can mark those activities which enhances their capabilities.

C. Education of Teachers and Other Stakeholders

Intensive teacher education programme will be undertaken to sensitize and build capacity of the regular teachers and resource teachers on meeting the learning needs of all teachers to provide quality education to CWSN and improve their learning outcomes.

The sensitivity among the teachers for the CWSN is very essential part of the education system. The teachers play a role of guide for the students. So, they should have knowledge regarding the problems of the hearing impaired students to cope within the classroom activities. This information is essential not only for the teachers but for the parents also. The surroundings of the students make them vulnerable or empower them according to the opportunities provided to them. The positive attitude of the teachers and the parents of the children with hearing impairment provide them more opportunities to flourish their abilities.

Trainings of educational administrators including headmasters, all other staff & relevant personnel of school education should be regularly organized. Special focus should be given on mechanisms for safety and security of children with special needs.

The students with hearing impairment do not have any knowledge about the outer world and also about the threats which they can face due to their ignorance. The students with special needs are more prone to child trafficking and other heinous crimes. So, the administration of school and other staff also have responsibility to take care of such students so that they do not face any kind of mishap.

D. Curricular Access

The school curriculum must be inclusive as envisioned in NCF-2005. It should ensure that the same curriculum be followed for children with and without special needs, but with adaptations/modifications, if required, in learning content, teaching learning processes, teaching learning materials/aids and in evaluation, etc. Provision should be made to provide text books and curriculum in accessible formats to CWSN.

The student with hearing impairment needs special attention of the teacher because of their inability to hear. The National Curriculum Framework 2005 focuses on learning by doing concept also. The framework emphasises on the children's creativity and on enhancing their potential by providing them guidance rather than classroom lecture. All children have their own individual capacities to learn and understand. So they must get proper opportunity to realise their potential and for that purpose the education can provide them different platforms. They can realise their potential when they are able to explore more things. The curriculum can be modified according to the ability of the students specifically for the children with special needs so that they can improve themselves without any pressure.

E.   Annexure IV of the RPwD Act, 2016

Alternative objective questions in lieu of subjective questions should be provided for hearing impaired persons. The students having hearing impairment have problem in constructing the sentences in proper manner so they should get choice in answering questions in an objective (MCQ) manner in examinations. It can also make easier for teachers to assess the improvement in the understanding of such students.

<h1 align="center">Chapter-Two</h1>
<h1 align="center">LITERATURE REVIEW</h1>

Education and educational psychology for inclusion have undergone a significant shift in the recent years. The focus of inclusive education has remained on the children with special needs (CSWN) and the same has been increasingly expanded to encompass its broader form. UNESCO (2016) explicitly recognises the need to include those children who are likely to be excluded, marginalised or underachiever in the educational system. UN SDG-4 envisages inclusive and equitable quality education and promotes lifelong learning opportunities for all by the year 2030. UNESCO in its Guidelines for Inclusion (2005) says, "Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children."

A. Review of Recent Literature on Inclusive Education

The issue of inclusive education has received much attention globally. Inclusive education is a wider concept which incorporates a number of disabilities. Inclusion of children with disabilities in mainstream classrooms has become the focus of extensive research in education. Several studies, empirical and non-empirical, have been conducted across the world on the issue of inclusive education for the students with disabilities. Research in this field has both academic and social benefits for the students with disabilities, such as providing opportunities for communication and social interaction. In India, we come across many studies on this particular aspect of education but very few studies have emphasized on the hearing impaired students. This chapter tries to give an overview of a few of studies to highlight the importance of the area of study.

Rosa, O.M. & L.M.V. Angulo (2019) in their study in Canary Islands questioned the reliability of the Inclusion for Children and Adolescents Questionnaire (ICAQ) when measuring the attitudes of students having hearing loss towards

inclusive education in public schools? They collected a sample of 297 students from the Gran Canaria province and another sample of 137 students from the Tenerife province from the average age group of eleven years. They try to determine the reliability and relevance of the ICAQ using factor analysis. The found following four factors of behind students' attitudes towards inclusive education: involvement of family and application of technology, communication with medical specialists, inclusion in the centre, and assessment of the supportive technology. They concluded that there are wide differences between students with hearing impairment in terms of the inclusion in the centre and assessment of the support technology. They found that total score of the students' attitudes towards inclusive education was high. This research is remarkable for the governing board/management of any school, especially towards educational planning and inclusive education.

Centre for Studies on Inclusive Education (CSIE), U.K. (2018) in the 'Index for Inclusion: developing learning and participation in schools' studies the index for inclusion which is a set of materials to guide schools via a process of inclusive school development. It is about fostering high achievement and building supportive communities for staff and students in school.

A school can use the Inclusion Index to:

- adopt an approach on self-review basis to analyse its culture, policies and practices and to find out the barriers in learning and participation in each of these areas.
- decide its own priorities for necessary changes and to assess their progress.
- use it as an integral component of existing development policies, to encourage a wide and deep scrutiny of everything that can make up its activities.

The Index takes the social model of disability as its starting point, builds on good practice, and then organises the Index work around a cycle of activities which guide schools through the stages of preparation, investigation, development and review.

Alasim, K.N. (2018) in his study entitled 'Participation and Interaction of Deaf and Hard-of-Hearing Students in Inclusion Classroom' identifies different strategies that facilitate in the interaction and participation of Deaf and hard of hearing pupils in the general classroom at a public elementary school. In addition, he also traces the issues which limit the participation of such students in activities. His study particularly emphasizes on description of the factors related to the general education

teachers, interpreters of sign language and Deaf and hard of hearing students, and hearing students to develop a practical framework to assist pupils with hearing impairment to acquire more social and communication skills. He collected data through classroom observations and interviews. He finds that Deaf and hard of hearing students face barriers that limit their interaction and participation in the general classroom. Apart from that, he identified specific strategies to facilitate and increase the participation of Deaf and hard of hearing children in the general education classroom.

The data collected shows that facilitation of interaction and participation of Deaf and hard of hearing students in the general classroom requires skills and knowledge of the staff, teachers and interpreters in the schools. Apart from that awareness and attitudes of teachers toward inclusion and deafness are important for increasing the interaction and participation of Deaf and hard of hearing students in the general classroom.

On the students related issues, the study find that the spoken language difficulties of the Deaf and hard of hearing students are the most challenging barriers that limit the interaction and participation of those students. Also, these students are always found to be struggling and busy during the class because they have to work on their task and watch their teachers and interpreters simultaneously. They get the information from the teachers with a time lag.

This study recommends that school staff should improve their mutual collaboration to develop the best strategies that make general education classroom appropriate for the Deaf and hard of hearing students. Teachers should assume the responsibility to improve awareness among general hearing students about the attributes of Deaf and hard of hearing students. When the entire school staff works together and provides all possible support to those students most obstacles that these students encounter in the general education classroom can be addressed.

Erbas, E. (2017) carried out her study titled *'Strategies that teacher use to support the inclusion of students who are deaf and hard of hearing'* designed to assess the teaching strategies of general teachers in inclusive elementary classrooms at the Midwest (USA). The objective of the study was to find out if the general education teachers use strategies and to identify the ways in which these strategies are used for promoting inclusive education for Deaf and hard of hearing students. The data was collected using interviews and observations of three general teachers. As per the

study, the general teachers' attempt to use strategies for Deaf students and also responses to follow up highlights the assistance of Sign language interpreters.

The teachers reported that their teacher training programme did not adequately deal with the needs of hearing impaired students and that they felt helpless while teaching these students without interpreters. In lieu of that the general teachers use visual and technical devices in the classroom to assist the hearing impaired students and make learning enjoyable for other students also. The study concludes that the general education teachers attempted to support the inclusion of Deaf and hard of hearing students by adopting various strategies in their classrooms. Apart from that, the findings significantly contribute to the literature on the educational background of teachers and on the support of other staffers such as interpreters and special education teachers helping in the education of such students.

Rebecca, R.L. (2016) in his study entitled *'The perceptions of General Education Teachers on the Inclusion of students who are Deaf or Hard of Hearing in the General Education Classroom'* analyses the attitude of the general education teachers towards the inclusion of hearing impaired student in their classrooms and examines the strategies they used to teach the students with hearing loss. This study was conducted through an online survey of the general education teachers in the Southern East Mississippi region in U.S.A. The questionnaire method was used to measure teachers' attitude through three domains: effective strategies for HI students, educational support of their districts and cultural and geographic variation as a test tool. On the basis of the survey, the study suggests that the teachers have positive attitude towards the deaf and hard of hearing students and they receive all the necessary facilities from the school. However contrary to that, it has been observed in the study that the majority of hard of hearing students are not receiving any kind of services from the school and there is no availability of Sign language teachers also.

The study talks about the 'Push in' model and 'Push out' model. In the Push in model the students with hearing loss get services within the general classroom and in the push out model, they are removed from the general classroom. The study favours the Push in model for the overall development of the students. The study concluded that the general education teachers are willing to include the children with special needs in their classrooms. In the study, attitudinal differences among the teachers are observed due to the different variables like gender, level of teaching and management, teachers' qualification and teaching experience.

Fahad, A. A. (2016) in his study entitled *'Teachers' attitudes toward the inclusion of Deaf and Hard of Hearing students in Regular Education'* describes attitude of teachers towards the HI students by analysing the teaching position, training on inclusion the teacher had received, years of teacher's experience, teacher's gender, prior work with CWSN and having a family member with disability as study variables. The study says that among these six variables only two variables, prior training about inclusion and work with CWSN, play a major role towards the inclusion of deaf students. The study, on the basis of an online survey of 196 teachers, finds that the attitude of the teacher towards the HI students remain slightly negative in the schools of Saudi Arabia. The meaning of inclusion is also not clear to them. The study also reveals that the special educators and regular teachers lack proper training for inclusion. There was a wide gap between the requirements of teachers and their availability in the school which creates additional task for the teachers and somehow, the overburden of these tasks affects the attitude of the teachers towards the deaf and hard of hearing students.

Tennant, L. (2016) in her conference paper *'Inclusion and Special Education Teacher Preparation: Cross Roads between Traditional and New Approaches in the Classroom'* reviews the legislations in India which impact the right to education of persons with disabilities. It discusses the changing roles of the special educators and the growing needs for making the teacher preparation programmes more accountable for meeting the needs of the individuals with disabilities in inclusive settings. Different trends in education of the children with disabilities have shaped the teachers training programmes in the past and in the present in India. The paper concludes that in the Indian context it can be argued that the practice of inclusive education is a continuous process and it involves attitudinal changes, imparting training, availability of resources and crucial support from various stakeholders and policymakers to ensure that inclusive education can be adopted and practiced by teachers. However, as inclusive education evolves with meaningful learning for students, some important issues need to be addressed such as lack of differentiation, funding, attitudes and beliefs of teachers, an unchanged curriculum and negative attitudes of peer. In contrast, effective training for teachers, positive values, beliefs and attitudes, community support, a well structured curriculum, supportive infrastructure, adequate funding and adequate resources are essential for a successful implementation of inclusive education in India.

Barman, Sudeb (2015) in his study entitled *'A comparative study between Hearing and Visually Impaired boys in relation to their Health related physical fitness and selected Psycho-Social parameters'* attempted to analyse the health related physical fitness, personality, cardio-vascular endurance, social maturity and intelligence. The sample size of the study was six hundred in which the ratio of visually impaired, hearing impaired and normal children was same. The study was conducted in five different districts of West Bengal. The study conducted the tests for physical fitness and endurance using Modified Harvard Step Test for Physical Efficiency Index (PEI), Children Personality Questionnaire for Personality Test and Culture Fair Intelligence test made by Cattell and Cattell for Intelligence. With the help of these tests, the study concluded that the students with hearing impairment performed equal to the normal students but better that the visually impaired students in the most of the physical, endurance and personality tests. On the other hand, the visually impaired students performed better in social maturity and intelligence test as compared to hearing impaired students but lesser than the normal students.

Singal, N. (2015) in her seminal paper *'Education of children with disabilities in India and Pakistan: An analysis of developments since 2000'* which was commissioned by UNESCO for drafting the Education for All Global Monitoring Report 2015. In the context of the education of children with disabilities in India and Pakistan, this study presents a thought provoking analysis of the key developments in educational strategies and policies, since 2000. Unlike many other countries in Southern part of the World, India has made remarkable efforts in addressing the needs of the children with disabilities. India has done so by evolving a multi-system approach, and enacting important legislations. On the other hand, Pakistan due to a variety of reasons so far has did not give same focus on disability. In the last 15 years or so, in India and Pakistan both field of education for children with disabilities have been shaped on the foundations laid by the international declarations on disability and education. Further impetus and support in this direction came from the slow but steady rise of NGOs operating in the field of disability and developments that took place in the education sector. Notwithstanding the developments since year 2000 some basic concerns still remain.

i.   In spite of remarkable rise in the enrolment rates of children with disabilities in India, facts remain that substantial numbers still continue to remain deprived of school education.

ii. The children with disabilities who get enrolled in the schools have very poor rates of attendance and are very less likely to progress through the education system.

iii. Rigorous research to assess the impact of these policy measures is missing.

iv. A lack of understanding prevails on what is working and what is not and why not working?

v. Very less deliberation takes place on normative question like what should be done to achieve the goal of Universal Primary Education for children with disabilities.

The paper concludes that the challenges that remain for the post 2015 education agenda are multifaceted and will need systemic changes.

Tichaona Mapolisa & Thembinkosi Tshabalala (2013) in their study *'The Impact of Inclusion of Children with Hearing Impairment into Regular Schools: A case Study of Dakamela Primary School in Zimbabwe.* They observed that children with hearing impairment experience discrimination in regular system of education. In the past, these children were put in separate classes or schools. Most schools have been observed failing these students with disabilities by denying them fair access to appropriate facilities. However, children with hearing impairment also have innate right of being included in the least restrictive school environment. Denying any child the opportunity to learn with their age group children and peers on grounds of a physical impairment is equal to marring their life opportunities of living fully in a multicultural society. They mention that Zimbabwe's Education Act, 1987 provides that children with disabilities should be accommodated in mainstream schools for their learning. However, the problem they observed is that most of the teachers in schools had not been trained to teach such children with impairment. The study examines that how do children with hearing impairment get benefits from education in an inclusive environment along with normal children. This article adopts a qualitative approach to inquire the experience of teachers in dealing with children having hearing impairment in their classrooms. They used a small sample of twenty teachers consisting of ten each of male and female chosen using purposive sampling. They have used an interview schedule to capture responses from the respondents, summarise them to discern common patterns. The study finds that various problems are faced by children with hearing impairment in mainstream schools and most teachers lacked the necessary training, expertise and resources to address the needs of

the children with hearing impairment. The study recommends for in-service training programmes for regular teachers on how to effectively address the needs of children with hearing impairment.

Kaur, S. (2013) in a research paper entitled *'Fostering barrier free access for children with special needs in India'* highlights the relevance of barrier free access, particularly for the children with special educational needs because such children have variety of needs which need to be addressed. The paper focuses on the teaching environment available for children with special needs and their access to physical environment and access to the curriculum. It also discusses different Acts and policies which emphasize on the provisions for barrier free environment. It exploits various secondary sources like articles, journals, books and websites to collect the relevant information. The paper recommends important strategies for institutional managers and planners to facilitate them in shaping some mechanism to promote accessibility and full participation of students with special needs.

Prakash, S. (2012) in her study entitled *'Inclusion of Children with Hearing Impairment in Schools: A Survey on Teachers 'Attitudes'* prefers an evaluation of *teachers'* attitudes towards inclusion as a good method to determine the success of the programme. This study was undertaken in the state of Andhra Pradesh in India, to measure and compare teachers' attitudes towards the inclusion of children with hearing impairment in schools. A questionnaire measuring three domains: (1) effective strategies for meeting the needs of all students, (2) the support for educational change in their district, and (3) inclusive education was used as the testing tool. One hundred teachers of various Government and non-Government schools from two districts of Andhra Pradesh participated in the study. The study concludes that there is a need for intervention to foster more positive attitudes among teachers, if the implementation of inclusive education is to succeed. It also has implications for the framing of laws and policies for children with hearing impairment.

Mathew, S. and A. Aggarwal (2012) in their paper *'Barrier free environment for inclusive education of children with hearing impairment at secondary level'* discuss that a number of national and international conventions, frameworks and legislations have endorsed the need for educating all children under one roof. Article 3 of the Salamanca Framework for Action (1994) recommended that all children should be accommodated by schools irrespective of their intellectual, emotional, physical, social, linguistic or other conditions. Their study suggests that Indian

education system should respond flexibly to attract and retain all children including children with hearing impairment. They acknowledge that the government's flagship programmes such as Rashtriya Madyamik Shiksha Abhiyan (RMSA) and Sarva Shiksha Abhiyan (SSA) launched under the aegis of the Ministry of HRD promote inclusive education of all which include children with hearing impairment in the mainstream schools. The study recommends that the barriers in inclusive education of children with hearing impairment needed to be identified and fixed to achieve the goals of SSA and RMSA,. This paper lists the measures for creating a barrier free educational environment for children with hearing impairment in secondary schools.

Sharma, D. (2012) in her paper, *'Attitude of regular elementary school teachers towards inclusive education'* prepared a scale having 24 items and administered it to study the attitude of teachers. She collected data from sixty eight teachers from private and government elementary schools from five different educational zones in the Jammu district. She used incidental sampling. She carried out an in depth study of a small sub-sample of thirteen teachers to obtain further details of teachers' attitude and factors that influence their attitude. Her analyses of responses show a negative attitude of teachers in imparting education to the children with special needs in an inclusive setting. The implications emerging from the paper suggest that in order to transform the attitude of in-service teachers towards the education of children with special needs, systematic interventions, training and pedagogy up gradation are required. A paper on children with special needs should be included in the curriculum of the pre-service teacher education. Teaching practices of the trainees should be planned in the inclusive schools where they can acquire adequate exposure for education of children with special needs.

Kohama, A. (2012) in her study, *'Inclusive Education in India: A Country in transition'* concluded that the Government of India has crafted a number of policies for the education of disabled children after the independence in 1947 but their implementation has been pathetic and policies failed not only to create an inclusive system of education but also in reaching their goal of "education for all" for the whole country. The author says that lack of political will, lack of public sector resources and capacity prevented proper implementation of such policies. The study recommends that the Indian government should try to bridge the gaps in Indian education system to usher into a strong system of inclusive education by consolidating the responsibility of education for the Government and making it accountable for their policies. It is

imperative on the government to establish an appropriate system of monitoring the implementation of policies, make financial commitments for inclusive education for all, and impart training to teachers in inclusive teaching methods. The study emphasizes on the need of physical and intellectual accessibilities for the children with disabilities. These children need to be included in the schools at par with others. The curriculum needs to be converted to provide equal access to the children with different ability levels. She writes that India has two separate curriculums "plus" and "general" and adds that an ideal inclusive system of education would have only one type of curriculum which is equally accessible for all students.

Singal, N., Jeffery, R. and Jain, A. (2011) in their qualitative study entitled '*The enabling role of education in the lives of young people with disabilities in India: achieved and desired outcomes*' presented the findings of how young people with various impairment understand the role of by education in their lives. India has achieved a remarkable increase in the enrolment rates of children with disabilities in schools in the last few years have seen. Nevertheless, there are unabating concerns about the outcomes of these achievements and efforts, particularly in terms of employability. They carried out this study in the rural areas of Madhya Pradesh state.

The paper brings out contrasting picture of the poor outcomes from education for these young people in terms of employment with their own perception about the value of schooling in sharpening their social skills and enhancing opportunities, cultural capital, particularly in terms of how they are able to cope up with stigmatising attitudes. Surprisingly these young people themselves focus on the enabling role of school education whereas the 'significant others' (primarily parents) consider school education a failure if it fails to ensure employment post education. The paper concludes with some important policy proposals regarding the nature and content of schooling and improvements in how benefits from government are accessed by these young people.

Singh, D. (2009) in the study entitled, *'Challenges in Inclusive Education and Service Provisions: Policies and Practices in Indian Context'* highlights the early policies and legislations passed by the Government of India such as the Right to Information Act, RTI Act 2005, Persons with Disabilities Act, 1995 and National Trust Act, 1999. The paper reviews some of the important papers to trace reasons for implementation failure of inclusionary policies in India. He finds that fragmented implementation of the policies of inclusive education, exclusion of children who did

not fit the required criteria, deficiency of resources, poor coverage of children with disabilities in the mainstream schools are some of the important issues behind unsuccessful implementation of inclusive education in India. Lack of quality programming for inclusive education has been found as a common issue in all the studies reviewed by the author. The study discusses the Inclusive Education for Children and Youth with Disabilities (IECYD) 2005, National Policy for Persons with Disabilities (NPPD), 2006 and questions the reality of mainstreaming of children with special needs in light of access and participation, evaluation and assessment, attitudinal changes, and pre-service training and in-service professional development.

It recommends that to ensure better implementation of inclusive education due attention should be given on certain issues like curriculum, attitudes, socio-economic constraints, language and communication, governance and human resource development. In order to monitor the implementation of policy and removing corruption in reporting the study suggests to develop a proper accountability mechanisms by creating some kind of legal enforcement network of regular monitoring and evaluation by external evaluators to ensure that the policies are really being implemented properly. It also recommends for the training of government officials at all levels to manage evaluation and monitoring and to enforce accountability and to make them conceptually aware about the inclusive education and disabilities.

Hodkinson, A. and Devarakonda, C. (2009) in their research paper, *'Conceptions of inclusion and inclusive education: A critical examination of the perspectives and practices of teachers in India'* brought out the details of the system of inclusive education in India. They discuss its evolution, development and operation. The period under consideration in the study is from the later part of the twentieth to the beginning of the twenty-first century. They did extensive literature review and conducted in-depth semi-structured interviews to examine how inclusion was defined and how the attitudes of Indian practitioners and their professional development were affecting the evolution of the inclusive education initiatives. The study concludes that inclusion in India was somewhat an elusive concept and a concept highly prone to terminological ambiguities. The paper recommended that for Indian education system to be truly and effectively inclusive then teachers must gain more knowledge and understanding of how inclusion is defined and operationalised.

An effective inclusive system of education cannot be operationalised if teachers are ignorant about its various conceptual aspects and its operational requirements.

Govinda, R. (2009) in his study entitled '*Towards inclusive schools and enhanced learning: a synthesis of case study findings from different countries'* under the aegis of UNESCO analysed sixteen case studies which were carried out in different countries from various parts of the world. The study collates and synthesizes the lessons derived from these studies. However, the synthesis tries to avoid any generalization from these case studies because they have been conducted under very different context and are related to innovations examined under different systematic conditions. The purpose of this study is to collate important elements from carious experiences expedited to create more accessibility and inclusivity in the schools. The study also explains children's participation in the schools their learning outcomes and their usefulness in terms of overall development and particularly in the cognitive development of the children. These case studies are conducted in research formats and designed to provide suggestions and indications to serve as a guide for developing programs and providing inputs for their effective implementation. They can help countries for defining good practices and particularly more so for the developing countries, where school environment and resources are in pathetic condition.

The study places particular emphasis on the inclusive education and learning improvements which go beyond the simple issue of enrollment and attendance and which ensure for individuals to acquire in the short term the basic competencies and the skills necessary for leading their daily life and they become lifelong learners over the long term.

Pandey, Y. (2009) in his study entitled *'A study of barriers in the implementation of inclusive education at the elementary level'* reviewed the existing special educational programme and identified the barriers in the implementation of inclusive education policies. The design of his study was descriptive survey type and mainly based on the data collection through interview and observation schedule. The population of the study consisted of Principals and regular teachers of all school that had children with special needs in Delhi. The study concluded that the concept of inclusion as a whole was not clear to majority of the principals. A large majority of the principal were unaware of the resources. They could make use for providing supportive services needed by children with special educational needs (CWSEN) for their education in an inclusive setup. More than half of the principals of both public

and Government school accepted that they do not have knowledge and awareness about legal provisions for the education of CWSEN. Almost all regular teachers of both types of schools were affirmative about the need for specialist support. The majority of schools did not have essential physical infrastructure/facilities like ramps, disabled friendly toilets, sitting and lighting arrangement etc. Most of schools did not have basic equipments, aids and appliances for children with special educational needs. They had only computers with text to speech software.

Rouse, M (2008) in his study entitled *'Developing Inclusive Practice: A Role of Teachers and Teacher Education'* tries to locate recent developments in the inclusive education and focuses on the role of teachers in imparting education to all children in a more effective manner than how they might have done in the past. His paper considers broader issues pertaining to teachers such as their achievements, participation, role and responsibilities, identities, skill and knowledge development. He emphasizes on the central role of the teachers in promoting inclusion in dealing with children who are having difficulties in learning. The policy of inclusion is difficult to implement because teachers are not adequately equipped and supported to impart education in an inclusive manner. This paper also provides some important suggestions regarding the role of teacher's education for honing their skills, sharpening their knowledge, and transforming their attitudes and beliefs to enable them to become more inclusive.

Lindsay, G. K. (2007) in his study entitled, *'Disability and inclusive education in India'* focused on the current status of inclusive education in India with a focus on children with disabilities. Children with disabilities were a minority that were not prioritized in the context of education programmes in India, although they were often found in many marginalized groups that were catered for if nondisabled - for example, girls, scheduled tribe, scheduled caste, and other backward caste children. Inclusive education may be a way of merging these children's needs in order to improve school quality and achieve education for all. However, a dominant special needs conceptualization of inclusive education in India, combined with negative attitudes towards disability were currently prevailing this approach.

Madan, J.M. (2007) in his article *'Barriers to access and success: Is inclusive education an answer?'* concluded that barriers to access and success can be viewed in physical as well as structural sense but more than that, it is the curriculum, the pedagogy, the examination and the school's approach, which create barriers. Unless

these unseen barriers are taken care of, access to all children and an assurance of success to all would remain a far cry. The inclusive education movement, combined with technological development and a new approach to open schooling had come at this crucial juncture. Countries and school systems choosing a holistic approach to access and success were more likely to succeed in reaching education for all.

Singhal, N. (2006) in her study entitled, *'Inclusive education in India: International concept, national interpretation'* examined education of children belonging to marginalized groups, with particular reference to children with disabilities, within the Indian context. It explored the Indian government's focus on the development of special schools, its efforts towards integration, and the more recent emphasis on inclusive education. Furthermore, the study attempted to elucidate 'inclusive education' as understood in various official documents. The study concluded by arguing for a need to develop a contextual understanding of inclusive education that is reflective of current educational concerns in India.

Sandill, A. (2005) carried out her study titled, '*A study to explore the adjustments that schools offered for differently abled children'* in 10 schools in Delhi. It was found that the schools employed strategies like peer pairing, modified curriculum, alternative evaluation systems to facilitate the participation of differently abled in regular classes, and made structural and organizational modifications to reduce physical barriers and increase autonomous mobility. The insights from the study indicated:

(a) Need for the coordination between the different hierarchical levels in the school system that came from consistent review and open communication, and

(b) Dynamic home school partnership to contribute to the efficiency of the process of inclusion creating conducive places for the differently abled children in the school system.

Lousie P., E. (2004) in her study titled *'Inclusive Perspective in South Africa'* examines the barriers to learning and development for the deaf and hard of hearing students. The sample survey of the study was conducted at 32 schools in the nine provinces of South Africa. The study was conducted with the help of questionnaires on the Hard of hearing/ Deaf students were administered on every school Principal to collect data. The insight from the study indicated that the deaf learners experienced many barriers in their learning and the schools remain unable to promote inclusive principles. The study concluded that the educators and educational managers have to

understand the inclusion of Deaf learners within the socio-cultural paradigm in place of clinical pathological paradigm. The clinical pathological model influences the attitude of the teachers towards the deaf students in a negative way which is very unfavourable for the inclusion.

Biswas, P.C. and A. Panda (2004) in their study entitled, '*A study on attitudinal barriers to inclusive education*' described the nature and extent of attitudinal barriers to inclusion of children with disabilities in the regular school as perceived by the high school senior students. A purposive sampling of two hundred (N=200) students, boys and girls, studying in classes IX and XI, enveloped into eight different classrooms located in rural and urban areas of Jaleswar district or Orissa, constituted the subject of study. It was found that the subject constituting two groups of secondary children studying at 9th grade and +2 stages (11th grade) of either sex residing at rural and urban areas of Orissa possess negative attitudes of the person with disabilities and also their schooling.

Singal, N. and M. Rouse (2003) brought out a research entitled, *'We do Inclusion: Practitioner Perspective in Some Inclusive Schools in India.'* This paper examines the notion of inclusive education in Indian context. It uses qualitative research to find out the views of the teachers and head teachers on inclusive education. Many teachers who were interviewed stated that, there had been no changes in their teaching strategies. Some justified this status quo by stating that these children with special needs do not have less IQ and hence they can fit into the existing classroom system. Teachers also responded saying that many existing constraints did not allow them to make significant changes in their practices. These constraints included vast amount of syllabus, limited time, large size classes, task of maintaining discipline, and many disabled students in class. It is stated that in spite of an international phenomenon, inclusion can best be understood in the local context and it should be an integral component of the mainstream education policy connected with broader objective like 'Education for All'.

Brennan, M. (2003) in her research paper '*Deafness, Disability and Inclusion: the gap between rhetoric and practice*' gives a critique of the interpretation and practice of educational inclusion, particularly in respect of deaf children in Scotland. She argues that the inclusion agenda, as presently understood, does not incorporate the fundamental paradigm shift which is required to bring social inclusion and equity for deaf children. Superficially 'inclusive' practices, such as the attendance of deaf

children at mainstream schools, often simultaneously deny the linguistic rights of deaf children and thus fail to ensure either full access to the curriculum and assessment or access to a satisfying social experience. Despite this, there are indications within Scotland and the Scottish Parliament of a more genuinely inclusive approach to linguistic and cultural diversity. Recent developments include the recognition of British Sign Language (BSL) by the United Kingdom Government and the explicit inclusion of BSL as one of the languages of Scotland. The challenge is to embed linguistic recognition and rights within education at all levels: this requires placing Deaf people at the heart of developments.

Sharma (2002) worked on, *'The attitude of the teachers towards the disabled'*. The study examined how is the attitude of teacher's related to various background factors, and the factors responsible for bringing about changes in the attitude of teachers. She reported that: the willingness of teachers to include children with special education needs (CWSEN) in general class depended on children's disability conditions. Teachers had positive attitude towards some children with specific disabilities like visual and hearing disabilities. Attitudes were least positive towards the intellectually impaired and those behavioral problems and the majority of the teachers felt the need for change in the school and classroom infrastructure.

In a report entitled *'Inclusive Education and Effective Classroom Practices'* edited by C.J.W. Meijer and published by the European Agency for Development in Special Needs Education in 2001, an overview of the existing literature on inclusive education from fifteen countries was presented. The project enquired upon the following questions:

i.   Which group of students with special education needs are the most vulnerable within mainstream academic settings?

ii.   What major problems are present in countries in the mainstream classroom practices that include students with special educational needs?

iii.   Which educational practices and factors are effective in evolving inclusive education?

The review of literature from fifteen countries, in the report, identifies at least five groups of variables (Cooperative teaching, cooperative learning/ peer tutoring, collaborative problem solving, individual planning and heterogeneous grouping/flexible instruction) which seem to be effective in inclusive education. The report says that emotional, behavioural and other social problems are marked by

almost all the countries as the most difficult barriers on the path of inclusion of students with special educational needs. These problems include disaffection and lack of motivation of the students with special educational needs. European mainstream schools face the biggest challenging in managing the diversity in the classrooms where such pupils are present. The most important finding in the report is that the development of the special need students is at least same and sometimes even more in mainstream educational settings compared to their placement in separate special educational provision.

Carson, K. (2001) in her study entitled *'The Inclusive education of students with a a hearing impairment: A case study inquiry'* analysed the inclusive placement of three students with hearing impairment. The students are chosen from non-English speaking backgrounds. They had different types of hearing impairment and they used hearing aids. The research used qualitative case study method to collect data from the field. The data collecting tool was designed to analyse the five variables which included academic performance of students, social and physical performance of students, the school environment and parental family support. The findings of the study explained the weaknesses and strengths of the students in inclusive placement. Apart from that the study contributed to the data for further research and discussions on inclusion in education.

Cawthon, S. (2001) in her research paper *'Teaching Strategies in Inclusive Classrooms with Deaf Students'* investigated teacher speech and educational philosophies in inclusive classrooms with deaf and hearing students. She collected data from language transcripts, teacher interviews and classroom observations. She calculated Mean Length Utterance, Total speech output, proportion of questions to statements, and proportion of open to closed questions for every teacher. She found that on average teachers directed fewer utterances to deaf than to normal hearing students but they reflected different language patterns on the remaining measures. In her research inclusive philosophies emphasize on an individualized approach to teaching, smaller class sizes, attention to deaf culture, advocacy and openness to diversity in the classroom. The role of the interpreters in a classroom includes translation of teacher's speech, voicing the sign language gestures of the hearing impaired students, facilitating and mediating communication between deaf students and their peers, and monitoring overall behaviour of the class in the classroom.

B.   Similarities and Differences

As we come across multitude of multifaceted research on the moot question of inclusive education for children with disabilities, we find similarities and differences across the research studies. The issue at hand is wide and deep which needs to be deeply examined from various angles so is the diversity across research studies. We encounter qualitative and quantitative research studies and majority of them are more empirical in nature than theoretical.

Some similarities can be traced in all such studies on inclusive education. First, most of them examine the role of all stakeholders in imparting inclusive education to HI children. Second, most of them are empirical focusing on primary information collected through interviews of the stakeholders. Third, most of them reach at more or less same research outcome wherein they reject the practice of special schools and advocate inclusion of HI children in general mainstream schools. Fourth, majority of them agree on the lack of availability of special education teacher and recommend their deployment in mainstream schools.

Some of the studies reviewed here emphasize on the role of the teachers while some others include whole staff teaching as well as supporting staff and yet there are some studies which see an important role of the school management in ensuring inclusion in the schools.

A substantial portion of literature reviewed here has a general consensus regarding the central role of teacher education in imparting education to Deaf and hard of hearing children. Pre-service and in-service training of teachers and their attitudinal changes towards hearing impaired students are regarded as impacting variables in inclusive education for Deaf and hard of hearing pupils and bringing them at par with and hearing pupils. Strategies adopted by teachers for the better learning outcomes of the HI children have also been examined in some of the studies in this group.

C.   Conclusion

A number of empirical assessment studies have been done across the globe to examine the implementation of the inclusive education policies. Such studies look at the enrolment rates, attendance rates, drop-out rates and educational attainments of hearing impaired students relative to the general students. Apart from that some of

this group of studies examines the accessibility of HI disabled children in educational institutions.

The forgoing review of literature tries to have an overview of the available literature on inclusive education for children with disabilities. Literature in this field is replete and touches almost every aspect of disability. The discussion in majority of the studies reviewed here is confined to the existing challenges in inclusive education, policy intervention and implementation, teachers' attitude. Various methodologies and research tools and techniques have been adopted by different scholars such as structured questionnaire based interviews and observation schedules to study the needs of the students with special educational needs, to assess the barriers to their educational needs, and to assess the competencies of the teachers. On the other hand some studies have assessed the status of the inclusive education in particular geographical region. The overview above reveals that, in India, a research gap seems to exist in this area at the primary level and there is lack of research on the level and extent of awareness, extent of implementation and penetration of inclusive education policies in elementary inclusive schools particularly in rural areas.

Chapter-Three
Research Methodology

This research is a study of inclusiveness for hearing impaired students in the school. The focus of the study is on the teacher's pedagogy and knowledge regarding the hearing impaired students. The study also tries to assess the provision of necessary facilities for hearing impaired students provided by the institutions to maintain an inclusive environment in the school premises. It does not intend to test any hypothesis but rather attempt to develop hypothesis by examining policy implementation at ground level (through field study) and by exploring potential relationship between different variables of inclusive education for hearing impaired students.

A.   Methodology of Research

The study is based upon primary data collected through survey method wherein surveys have been conducted on the teachers with special skills and the management of the selected schools, specifically the Government schools, in the Haryana state. The sample has been drawn through purposive sampling technique to ensure that meaningful inputs are generated for policy planning. In our study, the sample is collected by observing the five selected schools within the stipulated period of time.

This study is based on a sample size of fifty in which a greater part deals with the teachers, that is thirty seven teachers, and remaining thirteen are students. The reason behind this lopsided sample is that the problem of non inclusion is primarily faced by the HI students but assessing and acknowledging their issues by interacting with them is a very challenging task particularly in a short span of time. Therefore, a significant part of the study relies on the responses of the teachers, having HI students in their classes, on different aspects of the hearing impaired students. Due to communication barrier in surveying the HI students, survey of their teachers has been used as a second best approach.

Survey of the teachers has been conducted on the basis of a comprehensive questionnaire. The questionnaire covered not only their academic and experience aspects but also tried to cover all other aspects which may influence a teacher's

teaching capabilities. A part of the questionnaire focused on students learning within the school boundaries as it has some questions on their learning environment in school.

Table 1: District-wise Enrolment of Hearing Impaired Students in the Schools in Haryana State		
S. No.	District of Haryana State	Number of Hearing Impaired
1.	Ambala	93
2.	Bhiwani	105
3.	Charkhi Dadri	52
4.	Faridabad	86
5.	Fatehabad	108
6.	Gurugram	66
7.	Hisar	150
8.	Jhajjhar	66
9.	Jind	126
10.	Kaithal	118
11.	Karnal	65
12.	Kurukshetra	94
13.	Mahendragarh	88
14.	Nuh	172
15.	Palwal	112
16.	Panchkula	56
17.	Panipat	104
18.	Rewari	70
19.	Rohtak	78
20.	Sirsa	154
21.	Sonepat	140
22.	Yamuna Nagar	136
	Total	2239
Source: Inclusive Education Department, Government of Haryana		

B. Data Base and Instruments of Data Collection

The study is based upon exclusively on primary data collected through field work conducted in selected government schools in the Haryana state. The schools have been selected on the basis of the enrolment of hearing impaired students. It is

evident from the Table-1 that the number of currently enrolled HI students is very low in schools in different districts of Haryana. So, we have selected the particular government schools on the basis of the enrolment of the HI Students.

A specifically designed questionnaire has been used as the main instrument of data collection which has been administered through field surveys. Apart from that observation method is used for the HI students. Given the strong communication barrier observation is the only method to know about the students having hearing loss.

C.   Research Variables

The questionnaire for this research work incorporated the following selected variables:

1.   Educational Aids

Educational aids can play catalytic role in improving learning among the Deaf and hard of hearing students. Deaf and hard of hearing students particularly prefer visual learning strategies. This can be a challenge in an environment where essential information is delivered exclusively by word of mouth. The aids which facilitate the learning among the Deaf and hard of hearing students are following:

1.1   Handouts / Printouts.

Open ended question in the questionnaire are designed to know about the pedagogical knowledge of teachers for the HI students in their classrooms. More specifically, the questionnaire contains question on the facility of handouts for the HI students. Question on handouts also targeted to find out the things which are emphasized in making these handouts for the HI students.

1.2   Chalkboard/ Smart board

Question is also asked in the questionnaire about the use of chalkboard and smart board because the HI students have convenience in learning through visual aids. For the purpose of the present study, it is essential to assess whether the teachers adopt proper strategies to teach these students while working on the board.

1.3   PowerPoint Slides

The visual aids are the primary source of learning for the HI students. So, ideally such visual resources needs to be available and in use in the school for teaching the HI students. In this regard, the questionnaire incorporated questions on the availability and use of visual aids in the schools. Along with that, the study also

utilizes the information pertaining to this variable to assess the teachers' knowledge about the use of Information and Communication Technology.

2.   Medical Assistive Aids

The Clinical-Pathological model of Deaf Continuum deals with that disability by providing assistive devices to the students. Merely the acquaintance of devices does not empower the hearing impaired students to learn everything in the classroom. Nevertheless, the technology plays a very important role in the learning of Hearing impaired students.   Students with a hearing loss need to use assistive medical technology to participate in class. Government provides certain amount of money to schools for issuing hearing aids and other devices to the HI students to make school environment more inclusive. This study examines the budget allocations across the schools for the hearing assistive devices.

2.1   Hearing Aid

Hearing aid is very basic device to assist the HI students by enhancing their hearing capacity. However, not only the availability of such device is sufficient but its proper use of the device by the HI students is also a matter of concern. For this purpose teachers need to be well aware about the technologies and devices which are meant for enabling the hearing impaired students. The questionnaire consists of questions regarding the awareness of teachers about the various aspects of the needs of the hearing impaired students like the degree of hearing loss, use of amplifying devices, operation of hearing aid and whether these facilities are availed by the students or not?

2.1.1   Hearing Loop

2.1.2   Cochlea Implant

2.1.3   Personal Amplifier

The questionnaire for teachers has been designed to assess the inclusivity in school on the basis of the above mentioned variables (devices) which are helpful for the HI students. Questions have been prepared to assess whether these devices are available for the students or not. As the role of the teachers is central in promoting the learning of all the students and in making the classroom inclusive, the questionnaire has tried to cover the responses of the teachers comprehensively.

3.   Classroom Infrastructure

Apart from teaching and hearing aids and devices, infrastructure of classroom is very important to ensure equal access to the class content to all and particularly to

the hearing impaired students. Seating and lightening arrangements are vital component of the classroom infrastructure. As a matter of fact, the hearing aids have limited range capacity to capture the voice of the teacher. So, seating arrangements on front desks for the hearing impaired students may be a solution for augmenting their listening capacity and thus enhancing learning. In the study, this variable has been used to assess the impact of classroom infrastructure on the inclusivity and observation method has been used to assess the seating arrangements for the HI students.

4.   Teacher's Qualification and Experiences

The qualification and experience of teachers play a very critical role in imparting education. While qualification of a teacher improves the content of teaching, experience enhances the style of delivering the content. Apart from that, qualification improves the capacity of adaptation to new techniques teaching.

As far as HI students and inclusive education is concerned, the qualification of teacher is not directly related to the HI students but with the experience and with the help of special training they can learn special skills to deal with HI students. An experienced and well qualified teacher is more likely to be more efficient in classroom teaching and sensitive towards the needs of the students. The special skills acquired by a teacher can make class content and style of teaching more inclusive for the hearing impaired students. In this study, we have prepared a grouping of teachers on the basis of following three parameters:

a.   Academic Qualification

b.   Special training

c.   Experience

The questionnaire contained questions regarding the academic qualification and special training of the teachers. The personal information of the teachers has not been revealed as per the condition mentioned on questionnaire and as requested by the respondent teachers. The questionnaire contained close as well as open ended question to know about the special strategies teachers used for the HI students.

5.   Class Test and Class Participation

Class test and class Participation are other variables in the study to assess the inclusion of students in the classroom activities. We have examined the average marks of students with hearing impairment. By comparing the class test marks of the HI students with their classmates we have tried to check their learning level relative to

the class in the inclusive school. Since relative class test position just explain the academic learning levels of the HI students, we have used observation approach to check their performance in other activities as well.

6.   Pre-Service and In-Service Teacher Training

Teacher's training is an unavoidable requirement in evolving a truly inclusive educational system. The training of teachers (both in-service pre-services) is taken as a crucial determinant variable of the inclusive education. In this regard, we have assessed the training curricula of RCI and NCTE for imparting requisite skills to the teachers and how their training curricula make teachers efficient for imparting inclusive education. Evidently, the curricula guidelines of RCI and NCTE have been reviewed thoroughly from the perspective of Hearing Impaired students only. This variable is qualitative in nature in the study.

D.   Limitations of This Study

The study has certain limitations which can be detailed as following. An important limitation pertains to the pressing need to keep the questionnaire short and at the same time comprehensive covering all the aspects of the learning of hearing impaired students, so that the respondent teachers, in spite of their busy schedule, could give appropriate responses conveniently. While the response rate in the filled in questionnaires from the schools for the Deaf has been relatively high (95%), teachers responded very well. The information collated from the schools and the teachers through the questionnaires and through observation of the HI students for their curricular and extracurricular activities has lent a credible basis to the study. Enthusiastic and more than responsive participation of the teachers during the surveys made the study more authentic.

In the initial phase names, addresses and contact numbers of the selected five schools located in different Districts of Haryana, which accommodate Deaf learners, were obtained from the Coordinator of Inclusive Education, Government of Haryana. In the entire process, time has been a constraining factor in carrying out detailed field surveys. Though, I started coordinating with the Inclusive Education department very early but I was given all the relevant information very late which was not as per my planned schedule of the study.

Due to delay in executing field visit, and paucity of time, I requested the principals to support me so that I could discuss the questionnaire with the teachers and help them wherever they needed any help. The remote and scattered location of the selected schools having deaf students also proved to be a dampening factor on the pace of the field work. Some principals did not have any contact with Deaf learners in the schools and thus a more accurate view of the school would have been acquired from educators who teach Deaf learners and who are responsible to execute policies etc. at the ground level. Yet another limitation turned out to be the potentialities of a biased approach of the principals who might be interested in portraying their schools in a good light and therefore might have not provided any relevant information which might paint a negative image for the schools.

To conclude the author of this study is aware that there may be other Deaf learners being accommodated within hearing classes throughout Haryana and an extensive study is more desired, but presently neither the inclusive education department supports and nor the limited time period of field work allows me to work for all these schools in the entire state.

Chapter-Four
FIELD FINDINGS

T his chapter presents analysis of the primary data collected through surveys, interviews and observations. The primary data has been divided according to the selected variables wherein each section of data is aligned with a particular variable in the questionnaire. The questionnaire begins with the variables pertaining to the efficiency of the teachers. Responses from the teachers in the schools, having hard of hearing students, have been grouped according to the variables. To begin with, question number one to three in the questionnaire required the teachers to provide their academic information. The names of the schools have not been disclosed in the study for privacy reasons as the teachers were assured that the names of their schools would not be revealed and their anonymity will be ensured. This was particularly done to obtain accurate answers from the teachers without making them feel pressured to providing 'correct' answers. Such scheme of the investigation of the teachers was designed because each of the questions in the questionnaire was based on the Government policies for the children with special needs and the questions aimed to assess whether the implementation of these policies has been effective on the grounds or not. So anonymity remained a precondition for eliciting truthful responses from the teachers.

The questionnaire has been specifically developed to assess the inclusivity in school education for hearing impaired students in the mainstream schools located in the rural areas of Haryana state. The Rights of Persons with Disability Act, 2016 mandates upon different stakeholders to provide facilities to the children with special needs. The coverage of the RPwD Act, 2016 is very wide and covers almost all the aspects related to the development of the Persons with disabilities.

The questionnaire used in our study contains both close ended and open ended questions. The findings of our study are based on quantitative and qualitative analysis of the data. The study aims to assess inclusivity, with the help of selected important variables incorporated in the questionnaire. The analysis of the data set on each of the variables has been presented schematically in the following section.

A.   Teachers' Efficiency

Qualification of teachers plays very important role in their teaching abilities. Experience of teachers makes classroom teaching not only more efficient but also more sensitive to the needs of individual students in the classroom. Special skills acquired by teachers make class content more inclusive for the differently abled children and more so particularly for hearing impaired students. As NCF 2005, explains that the role of teacher is like a potter who develop child as per the student efficiency and interest. To assess the student capabilities and interest the teacher should be properly trained, qualified and experienced to enrich the potential of the students. So, we took three indicators to assess the efficiency of the teacher. In the questionnaire, the question one, two and three require the information on these indicators. The following analysis classification of the teachers surveyed has been made on the basis of the three parameters:

A.1 Qualification of Teachers
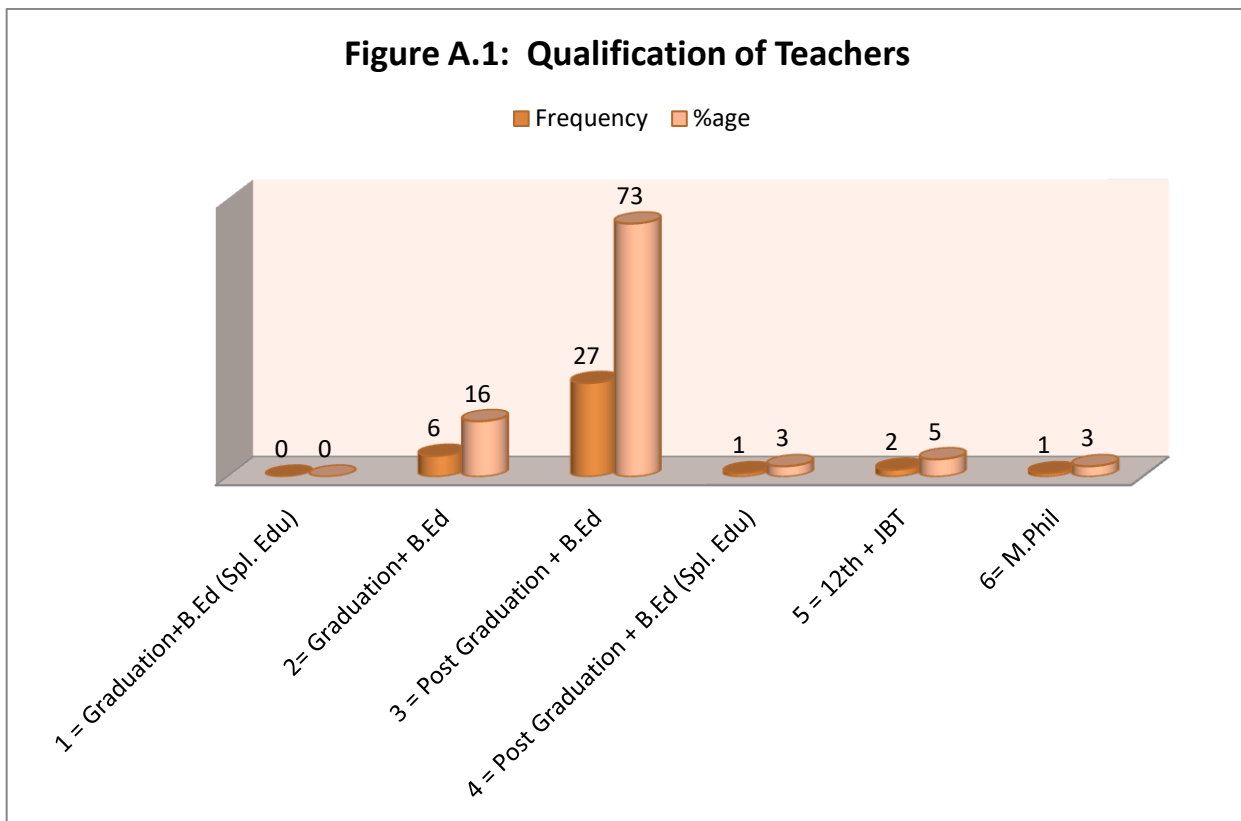
A.2 Teacher's Experience

A.3 Special Training for Teachers

A.1 Qualification of Teachers

Figure-A.1 and Table-A.1 depict that the teachers in the government schools are well qualified and possess strong academic background. This is reflected by the fact that in the sample 73 percent of the teachers have Post Graduation with B.Ed. which is a very high percentage. Sixteen percent of the teachers have Graduation with B.Ed. Three percent of them have even M.Phil. So, we can say that more than ninety percent of them have very high qualification background.

As stated before academic qualification is a crucial factor in the quality of classroom teaching. It not only influences the understanding of the students but also enhances the classroom environment. Generally, teachers with higher academic qualifications have better and deeper understanding of the subject. Their capacity to interpret the subject matter is high and they can teach the subject in an integrated way which may become more useful for students. Teachers' qualification is also relevant for teachers to develop methods of conveying the content to the hearing impaired students. The well qualified teachers have more potential to use different strategies to make classroom active and interactive. Interaction between students helps the hearing impaired child in making his/her peer group which in turn motivate him/her to participate actively in the classroom.

Table A.1: Indicators for Teacher's Efficiency		
Indicator : Qualification		
Qualification	Frequency	Percentage
1 = Graduation + B.Ed (Spl. Edu)	0	0
2= Graduation + B.Ed	6	16
3 = Post Graduation + B.Ed	27	73
4 = Post Graduation + B.Ed (Spl. Edu)	1	3
5 = 12th + JBT	2	5
6= M.Phil	1	3

Figure A.1: Qualification of Teachers

A.2   Teacher's Experience

Work experience in any field increases the quality of work. An individual can improve himself and may become an expert in his field with continuous efforts. This idea of learning by doing is equally true for teaching also. More work experience help in finding better remedies to the problems. In our study, the Figure-A.2 and Table-A.2 show that the 33 percent of the total teachers have more than 15 years of teaching

experience. Teachers who have experience of 10-15 years constitute 30 percent of the total. The well qualified teachers with enriched experience act like a proper package to deliver content and virtues to the students. They have experienced many challenges during the teaching and learned how to resolve them.

Table A.2: Indicators for Teacher's Efficiency		
Indicator : Teaching Experience		
Teaching Experience	Frequency	Percentage
1 = 0-5years	9	24
2 = 5 - 10 years	5	13
3 = 10 -15 Years	11	30
4 = More than 15 Years	12	33

Figure A.2: Teachers' Experience
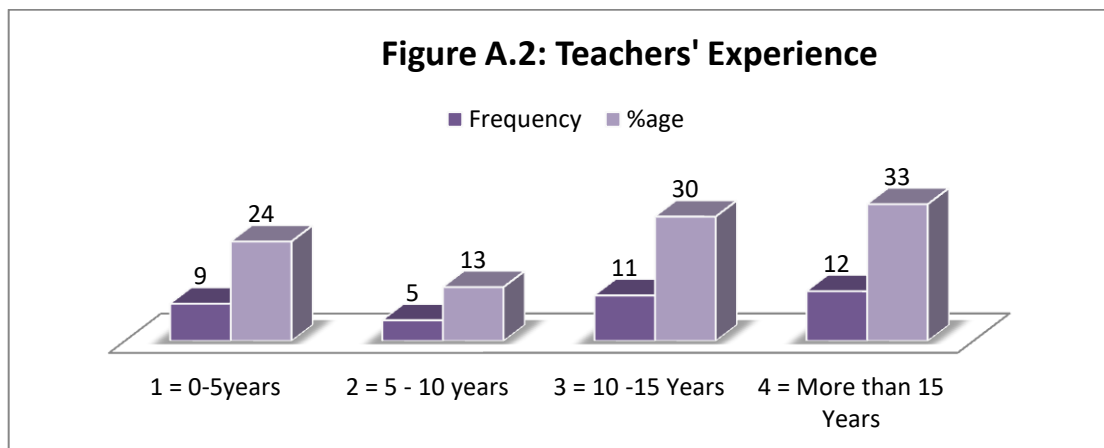
Moreover, a teacher's life is full of challenges because they have to deal with many children with their individual differences. They have to take care of the need of all children simultaneously and the children with hearing impairment need specific attention from the teacher. So, experienced teachers have some special strategies to address the challenges of hearing impaired students in the classroom. Experience of teachers is an effective tool to make classroom inclusive because they have expertise in classroom management through different activities.

A.3   Is the Training Imparted to Teachers Sufficient for HI Students?

Figure-A.3 and Table-A.3 show that only 31 percent teachers got training for teaching the Hearing Impaired (HI) student and that too only for 1-3 days during their refresher courses or orientation programmes conducted by Block Resource Centre. The percentage of teachers who have not been trained in any manner for educating the HI students is 84 percent which is very high and depicts the weakness of our education system.

Figure A.3: Is the Training Imparted to Teachers Sufficient for HI students?

2 = No   1 = Yes

%age: 84, 16

Frequency: 31, 6
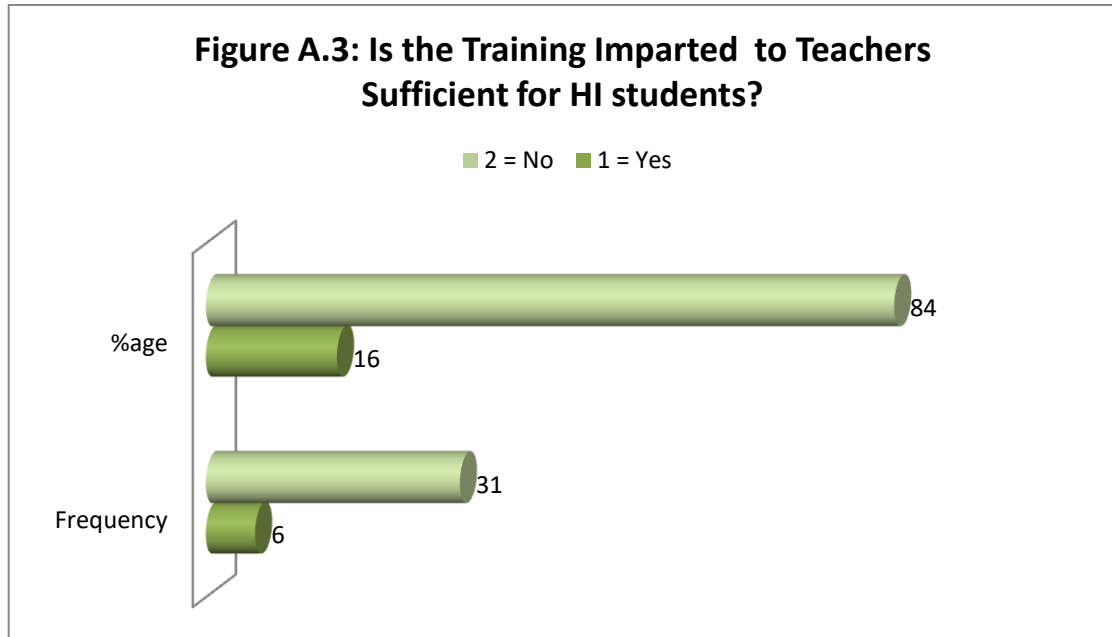
A child with hearing impairment needs some specific and different teaching methodology in classroom for understanding concepts. We cannot blame all alone the teachers for the lack of inclusivity in the classroom whereas whole system is responsible for legging behind of these children. Special training is must for the teachers so that they can accommodate the HI children and develop not only their curricular skills but also extracurricular skills.

Table A.3: Indicators for Teacher's Efficiency		
Sufficient Training for HI Students		
Sufficient Training for HI Students	Frequency	Percentage
1 = Yes	6	16
2 = No	31	84

B. Teachers' Knowledge about Hearing Impaired Students

In general terms, the teachers have to deal with students with their individual differences. To manage the individual difference of the each child is very challenging task for the teacher. The teacher can enrich the student potential only if he/she is aware about the strengths and weakness of that child. The student with hearing disability have a major issue in language development so to know about that student the teacher should be informed about the educational methods for the hard of hearing students. To assess the knowledge of the teacher regarding these students we set indicators which we asked in question Five, Six, Seven, Nine, Thirteen, Fourteen and Twenty five (See Addendum B for a copy of the questionnaire).

B.1   IEP for hearing impaired student

B.2   Information regarding the degree of hearing loss

B.3   Operation of Hearing Aid

B.4   Knowledge of Sign Language

B.5   Specific exam provision for HI

B.6   Knowledge regarding the policy of HI

B.7   Knowledge of amplifying devices

B.1   IEP for Hearing Impairment

"An **Individualized Education Plan** (or **Program**) is also known as an IEP. This is a plan or program developed to ensure that a child with an identified disability who is attending an elementary or secondary educational institution receives specialized instruction and related services."

Table B.1: Knowledge of Teachers Regarding HI students		
Individualized Education Plan (IEP) for HI		
IEP for HI	Frequency	Percentage
Yes	1	2.7
No	36	97.3

Figure B.1: IEP for Hearing Impairment
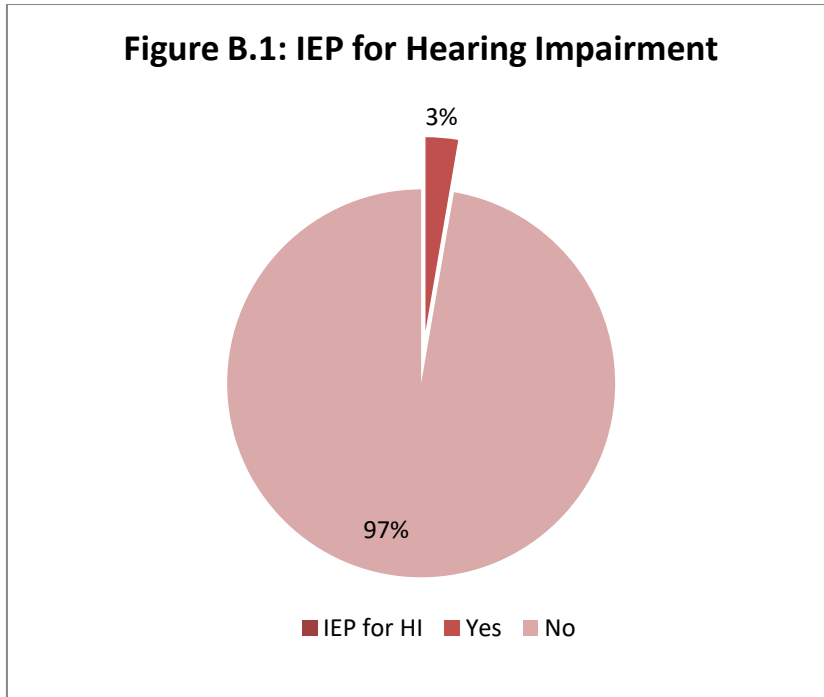
Figure-B.1 and Table-B.1 depict that the 97 percent of teachers have no knowledge regarding the IEP. Only 3 percent students have knowledge regarding the IEP. It is extremely pathetic to find that the teachers are not only incapable of using IEP but even many of them are completely ignorant about it.

B.2   Knowledge of Degree of Hearing Loss

Eighty six percent of the teachers in the sample have no knowledge regarding the degree of hearing loss. Teachers should be able to understand the degree of hearing impairment of the HI students in their classes without which we cannot expect inclusivity in the classroom and the notion of inclusion itself will remain an illusion in reality. Knowledge of the degree of hearing loss is the primary step to evolve different strategies for HI students. Teachers' ignorance about the basic concept of disability influences the methodology to teach these students.

Table B.2: Knowledge of Teachers Regarding HI students		
Knowledge of Degree of hearing loss		
Knowledge of Degree of hearing loss	Frequency	Percentage
Yes	5	14
No	32	86

Figure B.2: Knowledge of Degree of HI

| Yes 14% | Other 86% | No 86% |
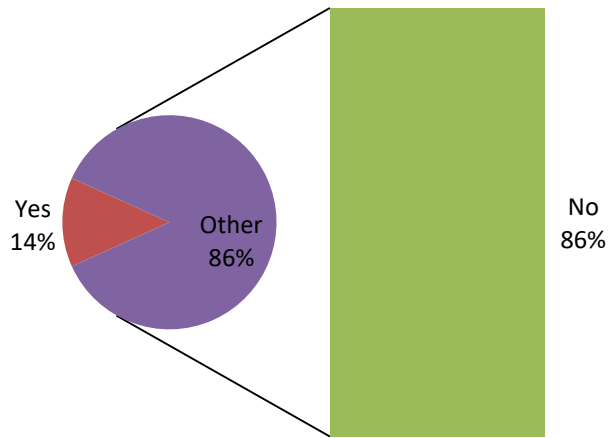
B.3 Operation of Hearing Aid

The Figure-B.3 and Table-B.3 show that 86 percent of teachers are unaware about the functioning of a hearing aid. It means that even if hearing aid is available to the students, they may still be unable to operate it and do not understand its proper usage. In that case, the teacher is the single option to facilitate the children. The ignorance of teachers affects the academic as well as social aspect of the lives of their HI students in particular.

Figure B.3: Knowledge of Teachers Regarding HI students

14%

86%

■ Yes
■ No
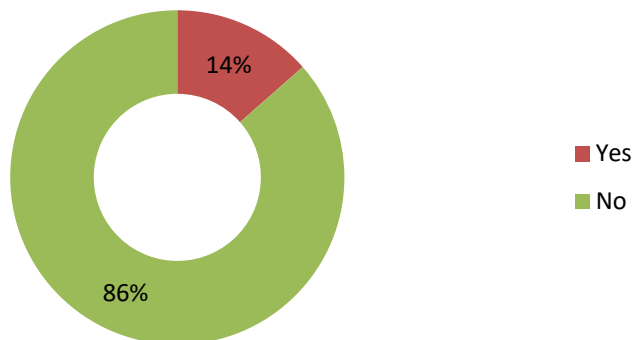
Table B.3: Knowledge of Teachers Regarding HI students		
Knowledge about Operating Hearing Aid		
How to Operate Hearing Aid	Frequency	Percentage
Yes	5	14
No	32	86

B.4   Knowledge of Sign Language

Communication is an indispensable component of the teaching learning process. Sign language is an effective way to communicate with the hearing impaired people. Table-B.4 and Figure-B.4 explain the lack of knowledge of sign language among teachers. An extremely low percentage (fourteen percent) of the teachers has a very little adaptability to the use of sign language in classroom communication but still they have an idea about how to convey their message to the student through gestures. On the other hand, eighty six percent of the teachers have no idea about the sign language. None of the teachers has expertise in sign language.

Figure B.4 : Teachers' Knowledge of Sign Language
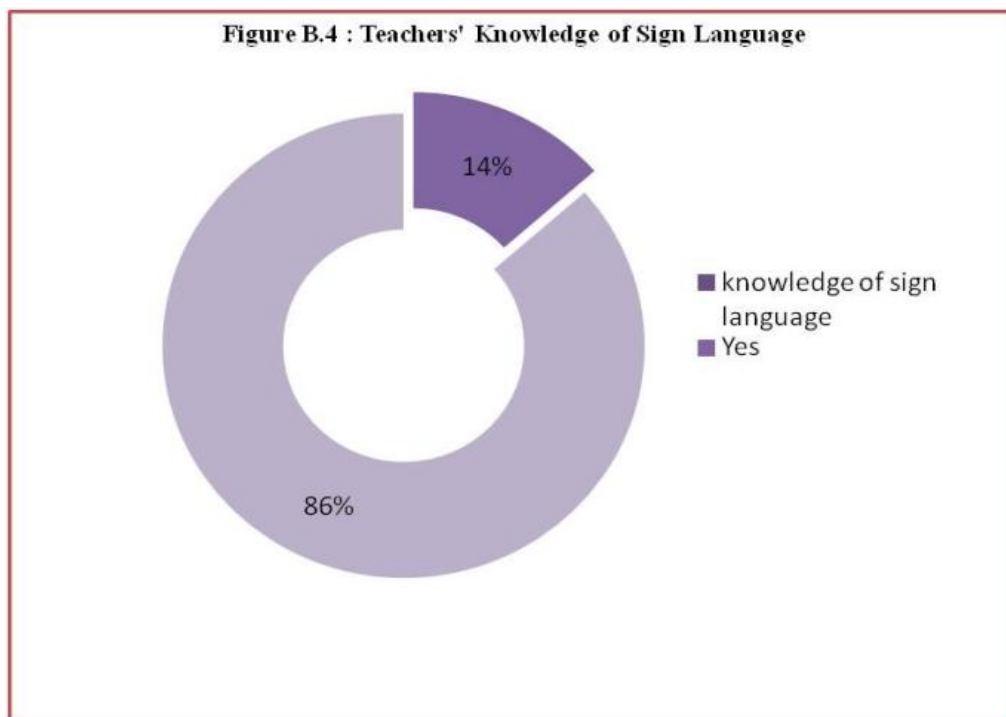
Table B.4: Knowledge of Teachers Regarding HI Students		
Knowledge of Sign Language		
Knowledge of sign language	Frequency	Percentage
Yes	5	14
No	32	86

B.5   Specific Exam Provision for HI Students

Table-B.5 and Figure-B.5 show that 81 percent teachers accept that there is no specific provision of exam for the HI students. This problem not meant for children only but for the teachers too. The teachers have no facility in the classroom for these children and even have a huge communication gap. Evaluation of such students is also extremely difficult. Students are unable to understand any language so it is the biggest challenge for the teachers to evaluate them without any proper training for HI.

Table B.5: Knowledge of Teachers Regarding HI Students		
Specific Exam Provision for HI Students		
Specific Exam Provision for HI	Frequency	Percentage
YES	7	19
NO	30	81

Figure B.5: Specific Exam Provision for HI Students

50
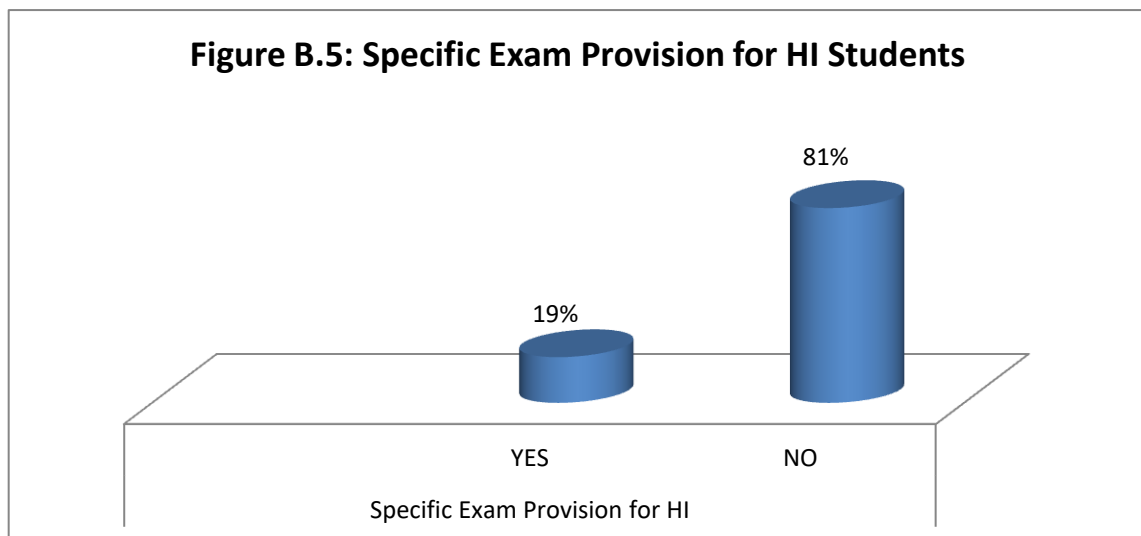
B.6   Knowledge Regarding Policy on HI Children

Figure-B.6 and Table-B.6 show that ninety two percent teachers have no knowledge about the policy on the hearing impaired students and astonishingly they have not even heard about it. This ignorance of teachers about the policy keeps students devoid and deprived of the benefits from it.

Figure B.6: Knowledge Regarding Policy of HI Children

Yes
8%

No
92%
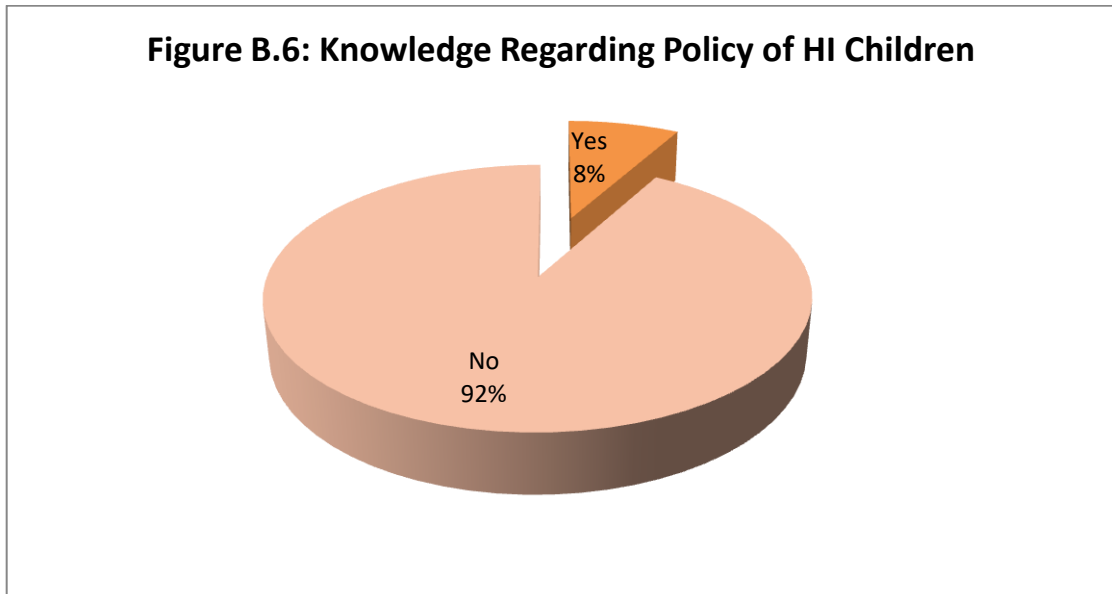
Table B.6: Knowledge of Teachers Regarding HI students		
Knowledge Regarding Policy on HI Students		
Knowledge About Policy of HI	Frequency	Percentage
Yes	3	8
No	34	82

B.7   Knowledge of Amplifying Devices

Figure-B.7 and Table-B.7 show that the teacher most of the teachers are not aware about the amplifying devices which are very useful for the students with hearing impairment. Only three percent of the teachers surveyed knew about the amplifying devices while the rest shoed their ignorance. Their unawareness about amplifying devices shows that they have no knowledge about the strategies adopted for hearing impaired students.

Figure B.7: Knowledge of Amplifying Devices

Yes
3%

No
97%
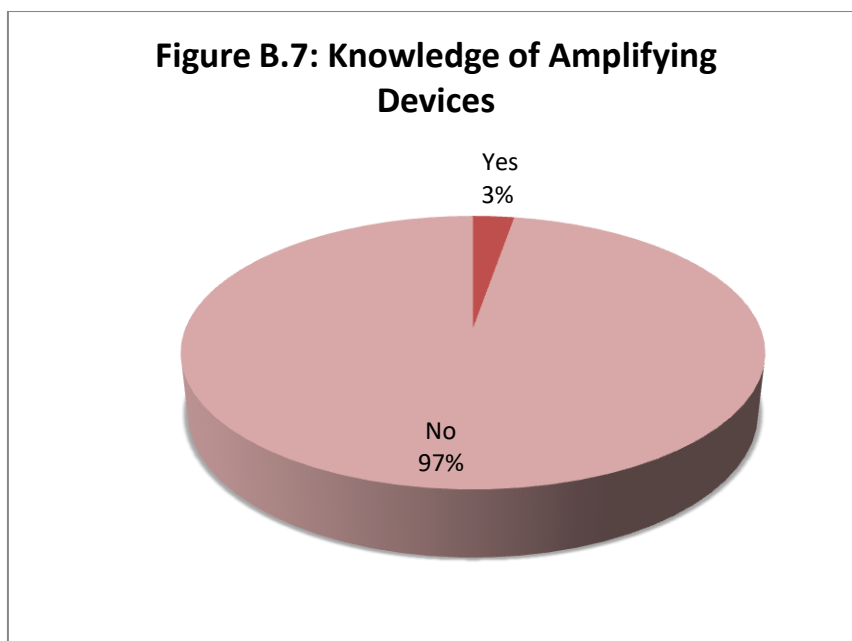
Table B.7: Knowledge of Teachers Regarding HI students		
Knowledge of Amplifying devices		
Knowledge of Amplifying Devices	Frequency	Percentage
Yes	1	3
No	36	97

C.   Teaching Strategies for Making Classroom Inclusive

The students with hearing impairment need special attention and methods to understand the concept. The language problem is the big issue to them for involve in the classroom. So, the teachers have a duty to provide them inclusive education and make classroom environment comfortable for these students. The NCF Position paper for the child with special needs recommended training for the teachers to deal with children with special needs and also ensure that the teachers have proper teaching learning material to make classroom practices inclusive. In order to assess whether the classrooms have inclusive decorum or not, the question number   twelve, fifteen, sixteen, twenty, twenty three, and twenty four in the questionnaire were prepared for the teachers. We have tried to assess with the following parameters:

C.1.   Ensure that students learn concept or not

C.2   Provide extra classes

C.3.   Would adopt different classroom strategies

C.4.   Provide handouts to students

C.5   PowerPoint facility in the classroom

C.6   Provision for special teacher in school

C.1   Ensure That the Students Learn Concept or Not

Figure-C.1 and Table-C.1 depict that the 65 percent of the teachers have no awareness about the learning of the students in the classroom which is a quite high percentage. The basic content understanding is the right of every student but ignorance of teachers becomes a hindrance for the student in their learning specifically for the hearing impaired student.

Figure C.1: Understand Concept
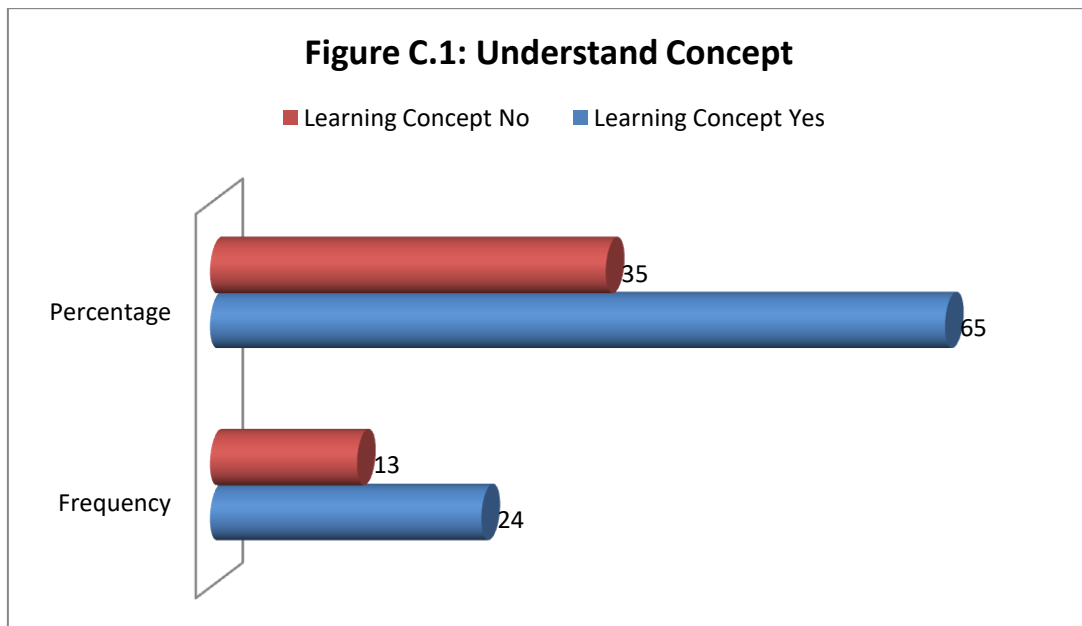
Table C.1: Teaching Strategies to Make Classroom Inclusive		
Strategy: Learning Concept		
Learning Concept	Frequency	Percentage
Yes	24	65
No	13	35

C.2   Providing Extra Classes

Figure-C.2 and Table-C.2 show that teachers put their extra effort for hearing impaired students by providing them extra classes in the school. The percentage of teachers who provides extra classes is 81 percent. The percentage is very high which shows the teachers try that the hearing impaired students achieve basic understanding of the curriculum.

Table C.2: Teaching Strategies to Make Classroom Inclusive		
Strategy: Extra Class		
Extra Class	Frequency	Percentage
Yes	7	19
No	30	81

Figure C.2: Providing Extra Classes
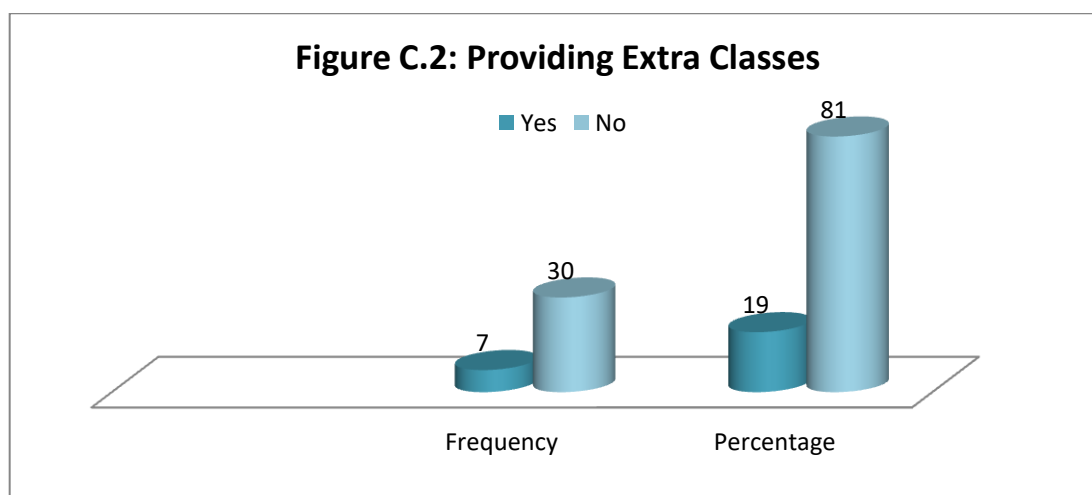
C.3   Different Classroom Strategies for Inclusion

Figure-C.3 and Table-C.3 depict that 62 percent of the teachers use different strategies for the hearing impaired students which is very difficult task for them but even then they put sincere efforts to provide them clarity in the subject through different methods. Another 30 percent teachers do not make any specific efforts and 8 percent did not respond to this question because they did not want to share their comments on it.

Figure C.3: Different Classroom Strategies for Inclusion

■ Frequency ■ Percentage

Category	Frequency	Percentage
Yes	23	62
No	11	30
No Resp	3	8
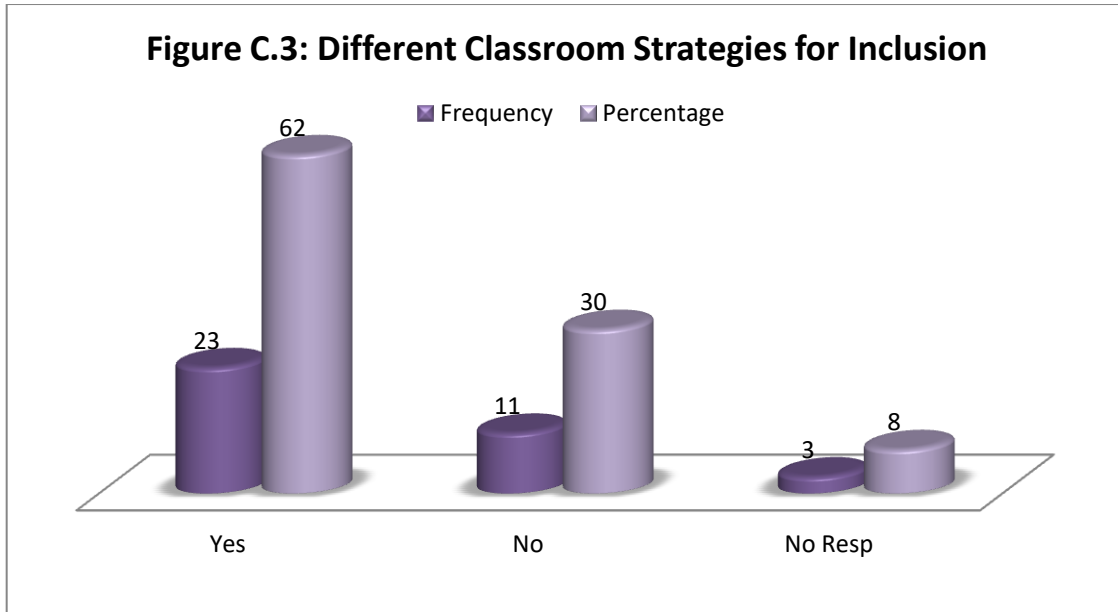
Table C.3: Teaching Strategies to Make Classroom Inclusive		
Different Class Room Strategies for Inclusion	Frequency	Percentage
Yes	62	23
No	30	11
No Response	8	3

C.4   Providing Handouts to Students

Figure-C.4 and Table-C.4 show that most of the teachers did not take any interest in providing answers of the questions of handouts because and more than eighty percent do not provide handouts to HI children which is very basic facility for them. Surprisingly, 73 percent of the teachers did not provide any answer to the question on handout.

Table C.4: Teaching Strategies to Make Classroom Inclusive		
Strategy: Use of Handouts		
Handouts	Frequency	Percentage
Yes	7	19
No	3	8
No Response	27	73

55

Figure C.4: Providing Handouts to Students

■ Frequency ■ %age

Yes: 7, 19
No: 3, 8
No Resp: 27, 73
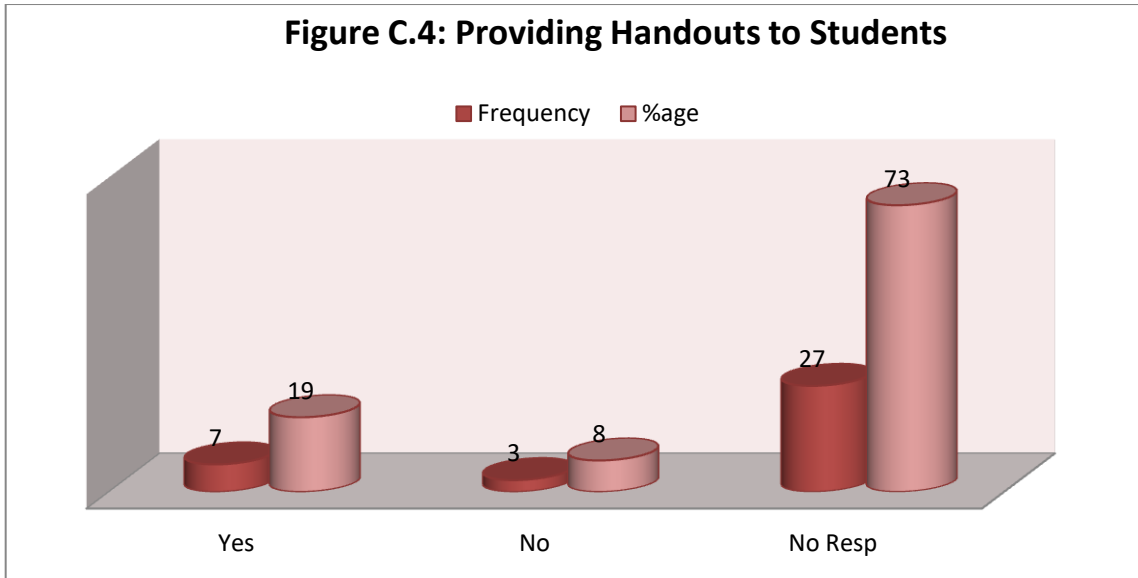
C.5   PowerPoint Facility in the Classroom

Figure-C.5 and Table-C.5 show the availability/unavailability of PowerPoint presentation facility in the school. Seventy eight percent teachers reported that they do not have PowerPoint facility in their classrooms. So, we can say that the school is deprived of even the basic amenities which are highly useful for the Hearing Impaired student. PowerPoint facilitates children in grasping the contents through visuals. Visual explanations of the content are easily grasped by the hearing impaired students also but lack of this facility causes relatively more deficiency in learning for the hearing impaired student than for others.

Figure C.5: PowerPoint Facility in the Classroom

☐ No ■ Yes

%age: 78, 22
Frequency: 29, 8
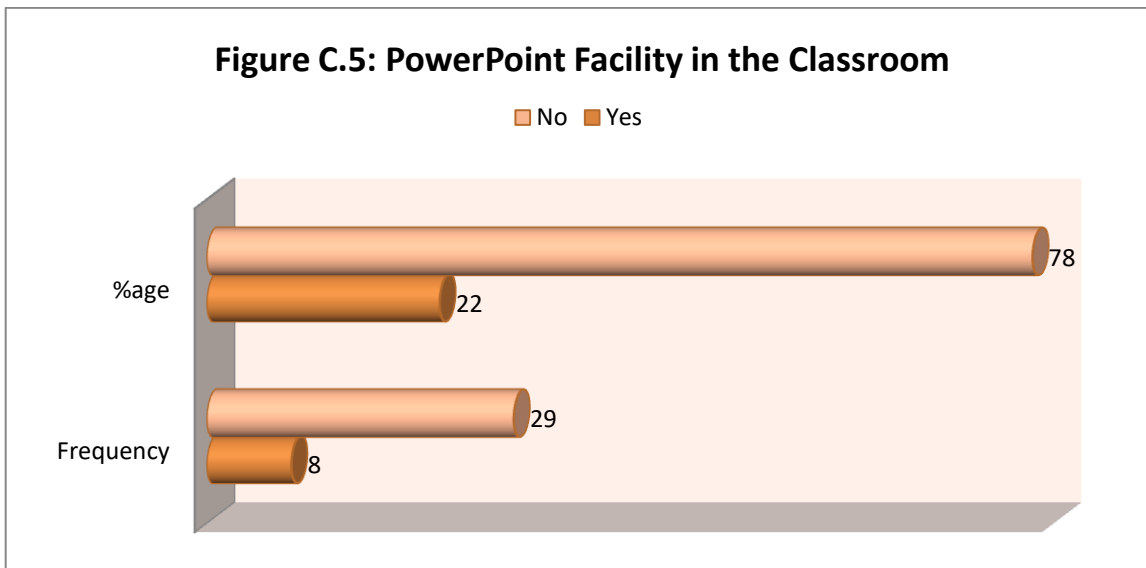
Table C.5: Teaching Strategies to Make Classroom Inclusive		
Strategy: Use of PowerPoint		
PowerPoint	Frequency	Percentage
Yes	8	22
No	29	78

C.6 Provision for Special Teacher in School

Figure-C.6 and Table-C.6 show the availability/unavailability of the provision for special teacher in the school. The teachers complained regarding the unavailability of any special teacher for the HI students. All the teachers have an issue with the recruitment of special teacher in the school. A child with hearing impairment faces the problem of lack of communication with others which can be resolved by recruitment of special teacher in the schools but unfortunately there is no single teacher for Hearing impaired students appointed in my sample schools.

Figure C.6: Provision for Special Teacher in School
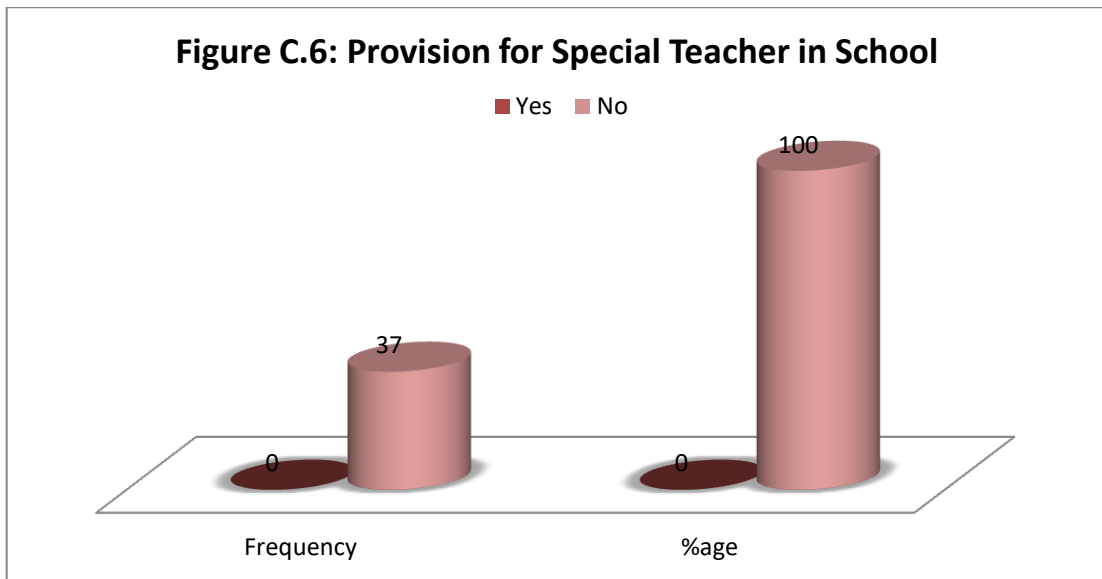
Table C.6: Teaching Strategies to Make Classroom Inclusive		
Strategy: Deployment of Special Education Teachers		
Special Education Teacher	Frequency	Percentage
Yes	0	0
No	37	100

D.   Challenges Faced By Teachers

Teachers are responsible for the overall development of the children but they are unable to use their full potential in this direction because they have to perform many things in their duties at the same time. They deal with a large number of students in a limited time period which becomes a tiresome task for them. In addition to that they have several non-academic tasks to perform mandatorily. In such a messy working environment in schools, enrolment of hearing impaired students in a class makes teachers' work more challenging because they need to give special attention and care during the class activities. So, we try to assess whether the workload of the teachers has increases or not after the adoption of inclusion policy in the schools through the question number Four, Eight, Eleven, Twelve, Twenty Three and Twenty Six during our study. Variable to evaluate these challenges are defined below:

D.1   Teacher Faces Problem During Teaching

Classes having hearing impaired students are very much different from the classes with only normal students whereby teachers face additional challenges in the former. The Figure-D.1 and Table-D.1 show the responses of the teachers facing challenges in the classes with HI students on regular basis. About 84 percent teachers accepted that they face challenges in the classrooms having students with hearing loss on the regular basis.

Figure D.1: Teacher Faces Problem During Teaching
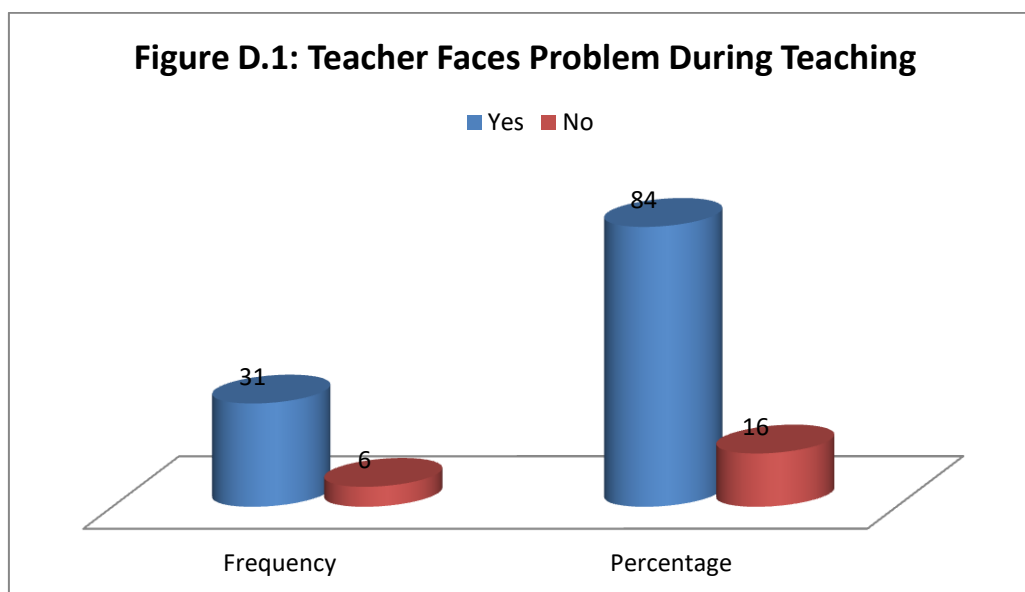
Table D.1: Challenges faced by teachers		
classroom teaching problem	Frequency	Percentage
Yes	31	84
No	6	16

D.2   Student Acceptance in Classroom

Figure-D.2 and Table-D.2 show how well the students mix up with the HI students in classrooms. It is seen from the Figure-D.2 that the relationship of students is very cordial. They promote each other to participation in many activities and same attitude we can see with the students having hearing impairment. The other students promote their classmates who have hearing loss in many ways like communicate with them with gestures and helping them convey the message to others as well.

Figure D.2: Student Acceptance in Classroom
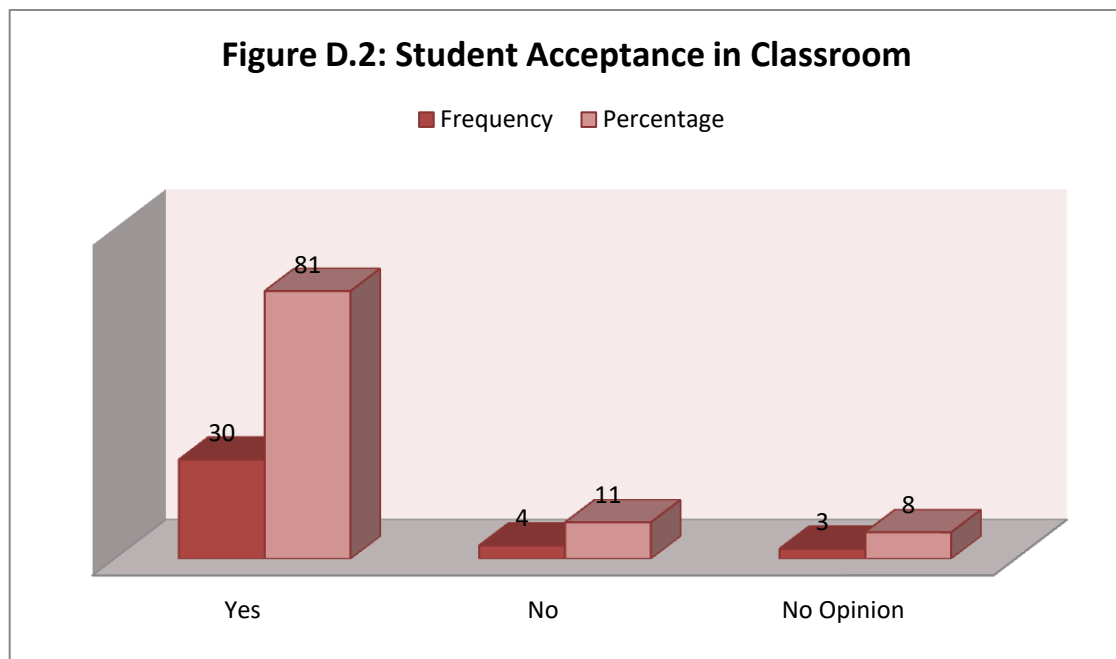
Table D.2: Challenges Faced by Teachers		
Student Acceptance	Frequency	Percentage
Yes	30	81
No	4	11
No Opinion	3	8

59

D.3   Difference between General Classroom and Classroom with HI Students

Figure-D.3 and Table-D.3 shows that the teachers face many challenges in the classroom. The percentage of teacher who accepted that there is much difference between the general classroom and classroom with hearing impairment is 84 percent. Teachers' perception matters a lot for the students learning that difference creates hindrance for the students with hearing impairment.

Figure D.3: Difference between GC and HI
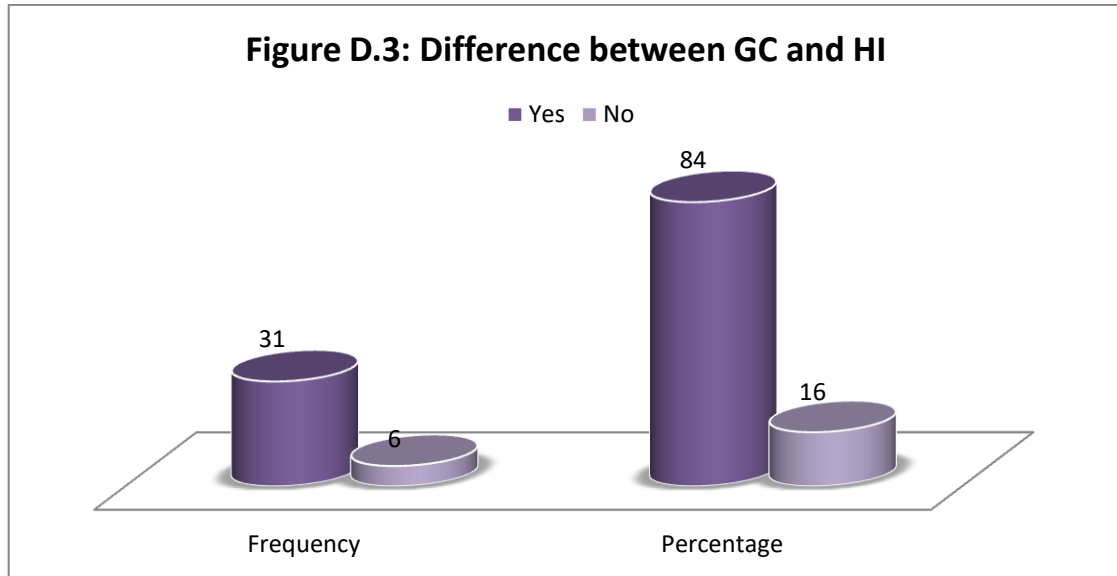
Table D.3: Challenges Faced by Teachers		
Difference between GC and HI	Frequency	Percentage
Yes	31	84
No	6	16

D.4   Learning Concept

Figure-D.4 and Table-D.4 show the problem teachers face in conveying their message to HI students. There is huge communication gap between the students and teachers which becomes a major hindrance in developing the content knowledge among HI students. The teachers who accepted that they are unable to convey content to the HI students are 65 percent of the sample.

Figure D.4: Understanding Concept

■ Learning Concept No ■ Learning Concept Yes
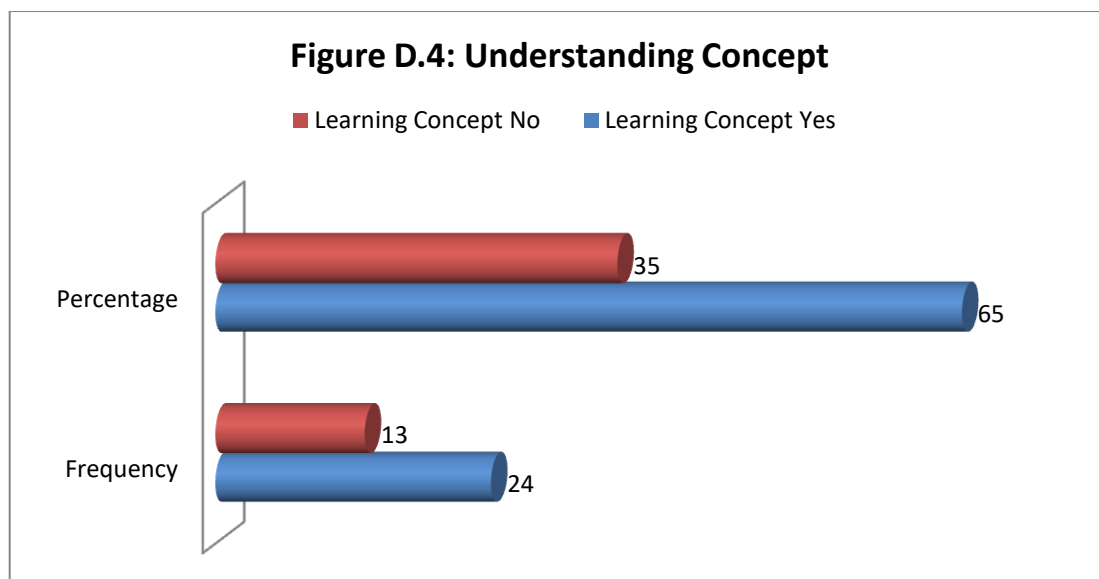
Table D.4: Challenges Faced by Teachers		
Learning Concept	Frequency	Percentage
Yes	24	65
No	13	35

D.5   Providing Extra Classes

Figure-D.5 and Table-D.5 show the provision of extra for the HI students which shows the extra effort the teachers put for the HI students through extra classes. It has also become a challenge for the teachers because they are already overburdened with their regular teachings and over and above that many other official tasks. Their efforts to provide extra classes within a short time period make their life very difficult. A very high percentage of the teachers (81 percent) accepted that they have been taking extra classes.

Table D.5: Challenges Faced by Teachers		
Providing Extra Classes	Frequency	Percentage
Yes	7	19
No	30	81

Figure D.5: Providing Extra Classes

■ Yes ■ No
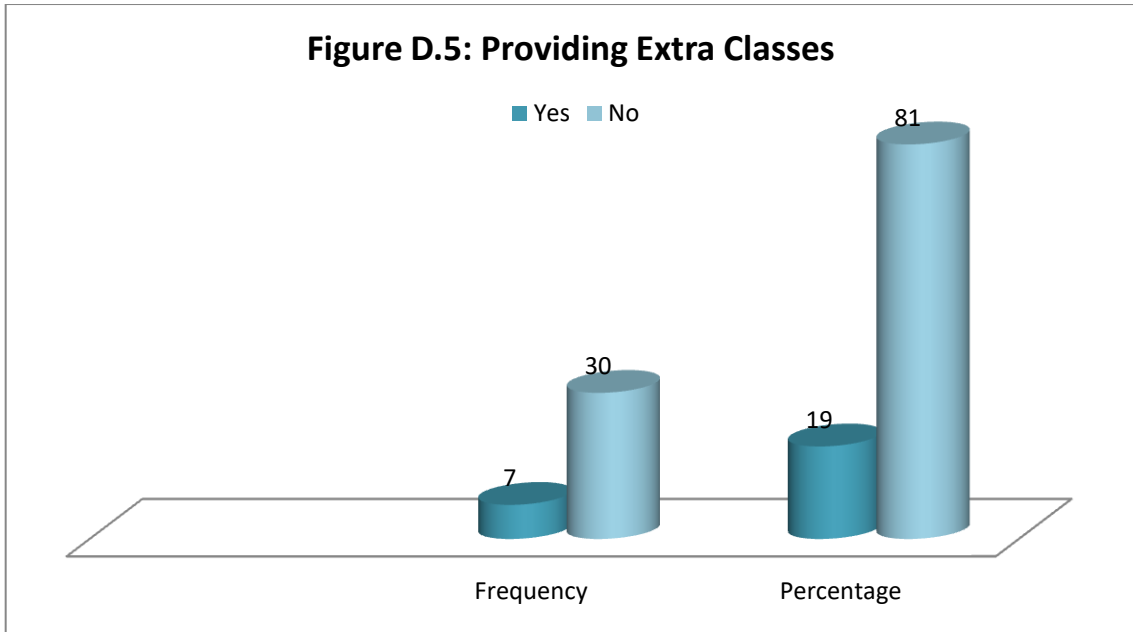
D.6   Extra Effort for Classroom Practices

Figure-D.6 and Table-D.6 show that 62 percent of the teachers use different strategies to impart knowledge to the HI students and thus try to make classroom more inclusive. Another, 30 percent of the teachers reported that they do not make any strategies for the HI students.

Figure D.6: Different Strategies for Inclusion

■ Frequency ■ Percentage
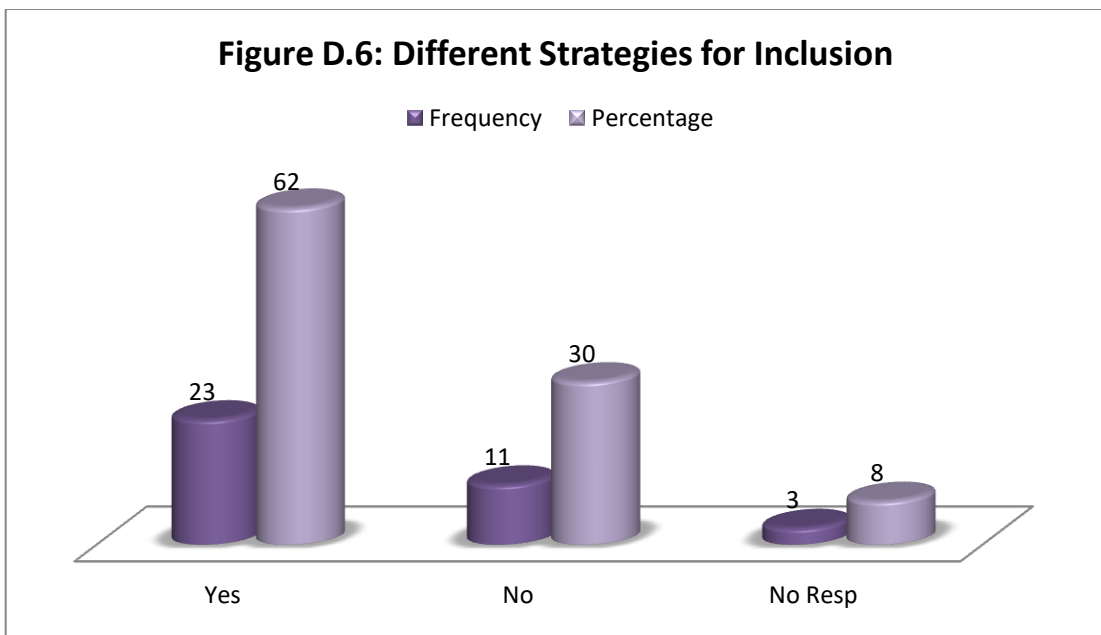
Table D.6: Challenges Faced by Teachers		
Different strategies for Inclusion	Frequency	Percentage
Yes	23	62
No	11	30
No Response	3	8

E.   Facility Available from Different Institutions

Samgra Shiksha Abhiyaan (SSA), Right to Education (RTE) and RPwD Act recommend different assistive devices and ICT for the children with special needs so as to ensure that each child get equal access to education without any discrimination on any ground. So, we try to assess whether the necessary facilities according to the policies reach to the ground level or not. The question number sixteen to twenty one and twenty four in our questionnaire are designed to trace the availability of the necessary facilities for the implementation of various policies of inclusion at the ground level. To assess the availability of the facilities we have used the following variables:

E.1   PowerPoint facility in the classroom

E.2   Provision for special teacher

E.3   Facility for teaching learning equipment

E.4   Facility from BRCs for Hearing Impaired students

E.5   Funding from the Govt

E.6   Percentage of Budget Earmarked for Hearing Impaired students

E.1   PowerPoint Facility in Classroom

PowerPoint presentations can be effectively used to impart knowledge to the HI students through visual method. Figure-E.1 and Table-E.1 show that the PowerPoint facility is not available in the majority of the schools. About seventy eight percent of the schools surveyed do not have PowerPoint presentation facility. So, the use of this technology at the school level is limited to only a few schools. In the absence of such basic facility in most of the schools, how we can talk about the concept of inclusivity which is difficult to be implemented feasible at the ground level.

Table E.1: Facility Available		
Power Point Facility	Frequency	Percentage
Yes	8	22
No	29	78

Figure E.1: PowerPoint Facility
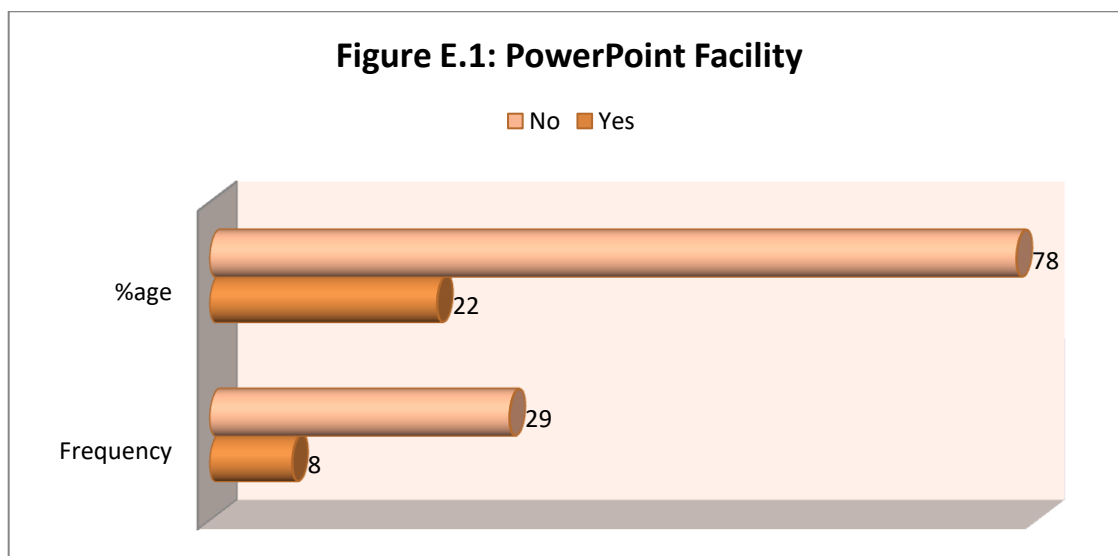
E.2   Provision for Special Teacher

Figure-E.2 and Table-E.2 show the perception of the teachers on the requirement of special teachers for the HI students. All the teachers surveyed expressed the requirement of special teachers in the schools but there is no recruitment of special teacher in the schools which is the worst thing which we find during our study. It is the most thwarting impediment in the attainment of inclusivity. Requirement of special teachers for the HI students is indispensable.

Table E.2: Facility Available		
Provision for Special Teacher	Frequency	Percentage
Yes	0	0
No	37	100

Figure E.2: Provision for Special Teacher

■ Yes ■ No

100

37

0   0

Frequency   %age
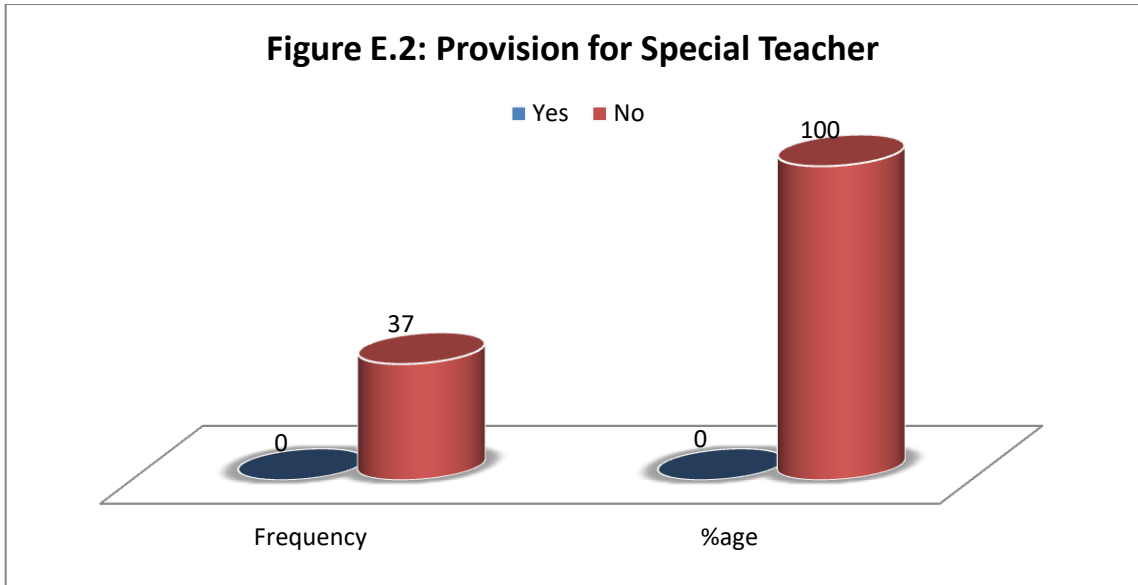
E.3   Facility for Teaching Learning Equipment

Figure-E.3 and Table E.3 show that 84 percent of teachers do not get any kind of teaching learning equipments from the administration of the school. Remaining 16 percent of the teachers get the teaching learning equipments but it is not meant for Hearing Impaired students. They have reported that they get books printed in enlarged fonts and Braille books. These are just for the visually impaired students. As far as HI students are concerned schools are not provided any teaching learning equipments which jeopardise the objective of inclusivity in school education.

Figure E.3: Teaching learning equipment

■ Yes ■ No

84

31

16

6
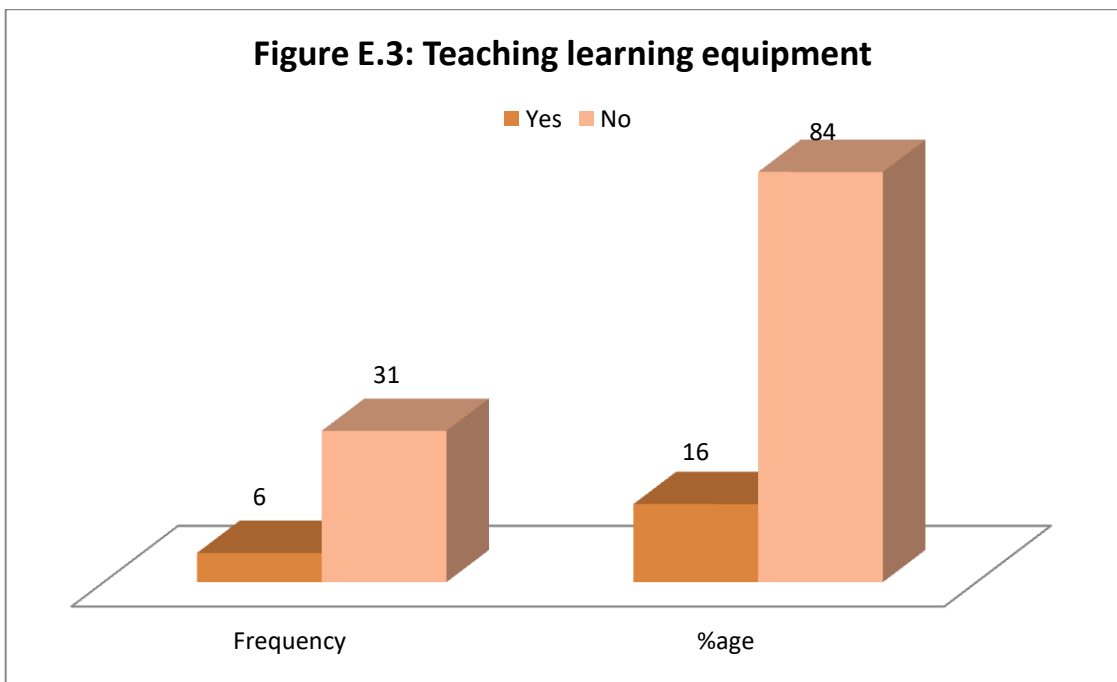
Frequency   %age

Table E.3: Facility Available		
Teaching Learning Equipment	Frequency	Percentage
Yes	6	16
No	31	84

E.4   Facility from BRCs for HI students

Figure-E.4 and Table-E.4 show the responses of the teachers on the minimum facilities that the Block Resource Centres (BRCs) provide to the schools. Only fifty one percent of the respondent teachers accepted that BRCs provide some facility to the schools in any manner. About forty one percent teachers responded negatively saying that the BRCs do not provide any facility while remaining about 8 percent did not respond to this question. It shows that the facility provided by the Block resource centres is meagre and unevenly spread across the blocks.

Figure E.4: Facilities from BRCs for HI students
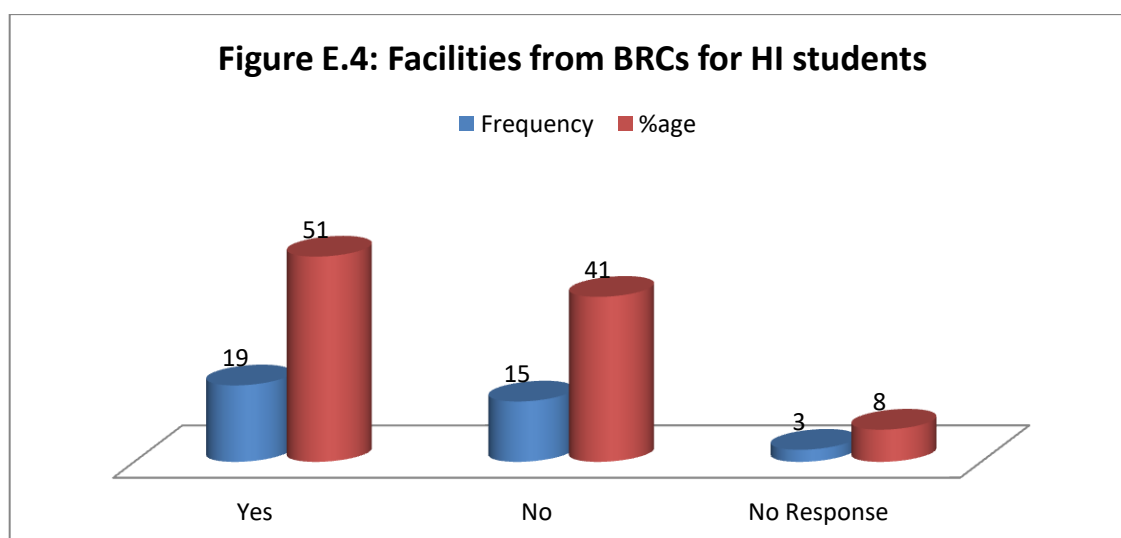
Table E.4: Facility Available		
BRC s Facilities for HI	Frequency	Percentage
Yes	19	51
No	15	41
No Response	3	8

E.5 Funding from the Government

Figure-E.5 and Table-E.5 show that Eighty seven percent principals of the school reported that there is no specific provision for the budget for the children with special needs (CWSN). Only, five percent principals reported that 5 percent provide to the government schools in form of scholarship.

Figure E.5: Funding for CWSN

■ Frequency   ■ %age

Yes	No	No Response
2 / 5	32 / 87	3 / 8
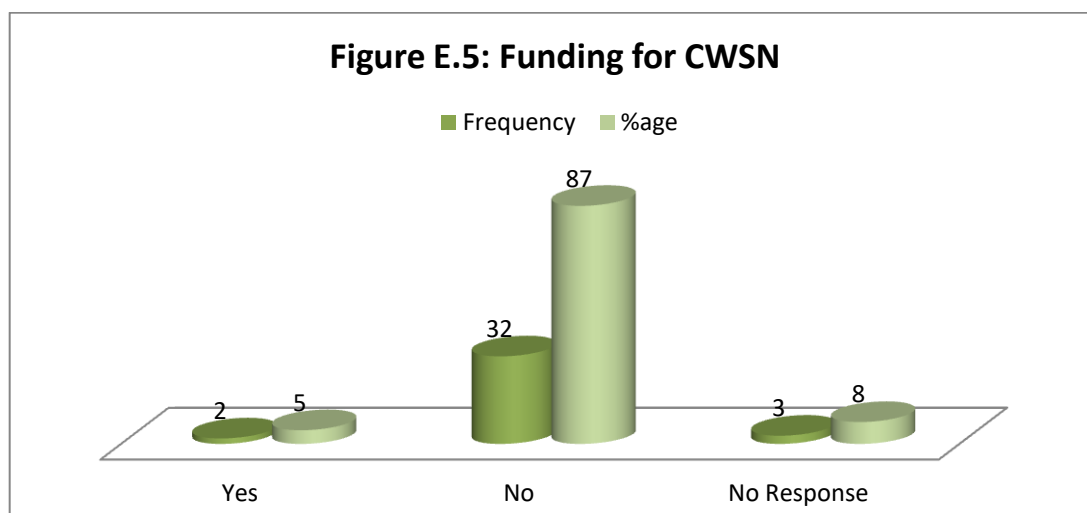
Table E.5: Facility Available		
Funding for CWSN	Frequency	Percentage
Yes	2	5
No	32	87
No Response	3	8

E.6 Percentage of Budget Earmarked for HI students

Figure-E.6 and Table-E.6 show that there is no provision for any budget for hearing impaired students in the schools. All the teachers surveyed replied that there is no specifically earmarked budgeting provision for those children in the school system.

Table E.6: Facility Available		
Percentage of Budget Earmarked for HI	Frequency	Percentage
Yes	0	0
No	37	100

Figure E.6: Percentage of Budget Earmarked for HI students

Legend: ■ Yes ■ No

Frequency: 37, 0
%age: 100, 0
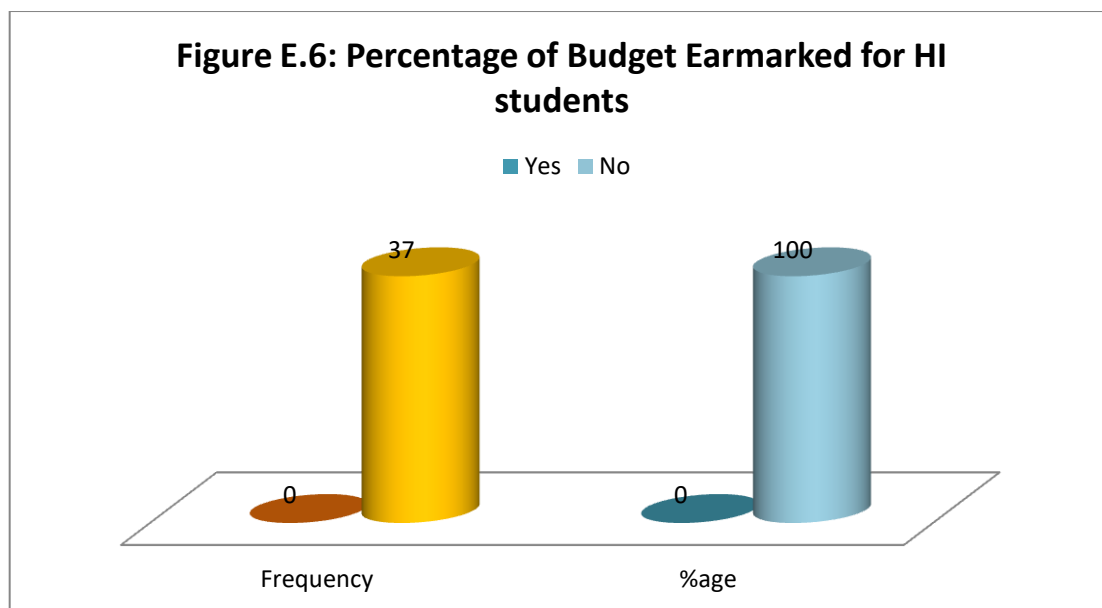
F. Qualitative Analysis of Teacher's Responses in Quantitative Way

As we mentioned earlier the questionnaire have both close ended and open ended questions. The open ended questions explain about different type of challenges faced by the teachers like how different they feel in teaching general classes and class having students with hearing impaired, what type of facilities are provided by the Block Resource Centres, what they expect from the administration of the school for the betterment of the children and what kind of special pedagogy they use to teach the children with hearing impairment. Thus open ended questions provide us the views of the teachers regarding those students.

Most of the teachers are in favour of sending these children to special schools so that they can feel comfortable with other students. Many teachers told us that these students can perform better in the special schools only because there the authorities provide many facilities for these children. One of the principals of our sample schools told us that these children have no ability of singing and reciting poem or even dancing at the stage so how could they give a chance to people to make fun of them. These kinds of explanations of the school heads for not providing an opportunity to HI students in the school programmes reflects very insensitive attitude. This depicts that they are unaware about the rights of the children with special needs. According to the teachers, seats are provided to the HI students in the mainstream classroom just to

68

fulfil the obligation of the school towards inclusive education. This kind of mindset is a curse for our education system.

F.1   Type of Teachers' challenges

In Figure-D.1 and Table-D.1, we observe that 84 percent of the teachers faced challenges. They face different kinds of challenges in the classroom on a daily basis. I just want to conclude their answers by explaining their difficulties. Firstly, 24 percent of teachers told me that they do not face any kind of challenges in teaching these students but the fact is that they do not have any special knowledge about the Hearing Impaired students and their peculiar needs. Another twenty percent of teachers told me that they face a major problem in communicating with them.

Table F.1: Teacher's challenge			
Teacher's challenge	**Code**	**Frequency**	**Percentage**
Not mentioned any reason	A	7	20
Not facing any challenge	B	9	24
Unable to convey the matter and evaluate	C	6	16
Communication Gap	D	7	20
Have less capacity to learn	E	2	5
Need special methods (Sign Language)	F	3	8
Smart Classroom	G	2	5
Class Strength	H	1	2

There is a huge gap in communicating with the Hearing Impaired students. Other, sixteen percent of the teachers explained that they face problems in conveying the content to these students and in evaluating them through examination. Eight percent of the teachers said that they needed extra teaching- learning material and special training to deal with these students. Five percent of the teacher asked about the smart classroom process for these students and two percent of the teachers claimed that the class strength is the biggest challenge for them to maintain inclusivity in the classroom. Remaining, twenty percent of teachers accepted that they faced challenges in the classroom but did not mention any specific reason for that.

69

Figure F.1: Teacher's Challenge

■ Percentage   ■ Frequency

Category	Label	Percentage	Frequency
Class Strength	H	2	1
Smart Classroom	G	5	2
Need special methods (Sign Language)	F	8	3
Have less capacity to learn	E	5	2
Communication Gap	D	20	7
Unable to convey the matter and evaluate	C	16	6
Not facing any challenge	B	24	9
Not mention any reason	A	20	7
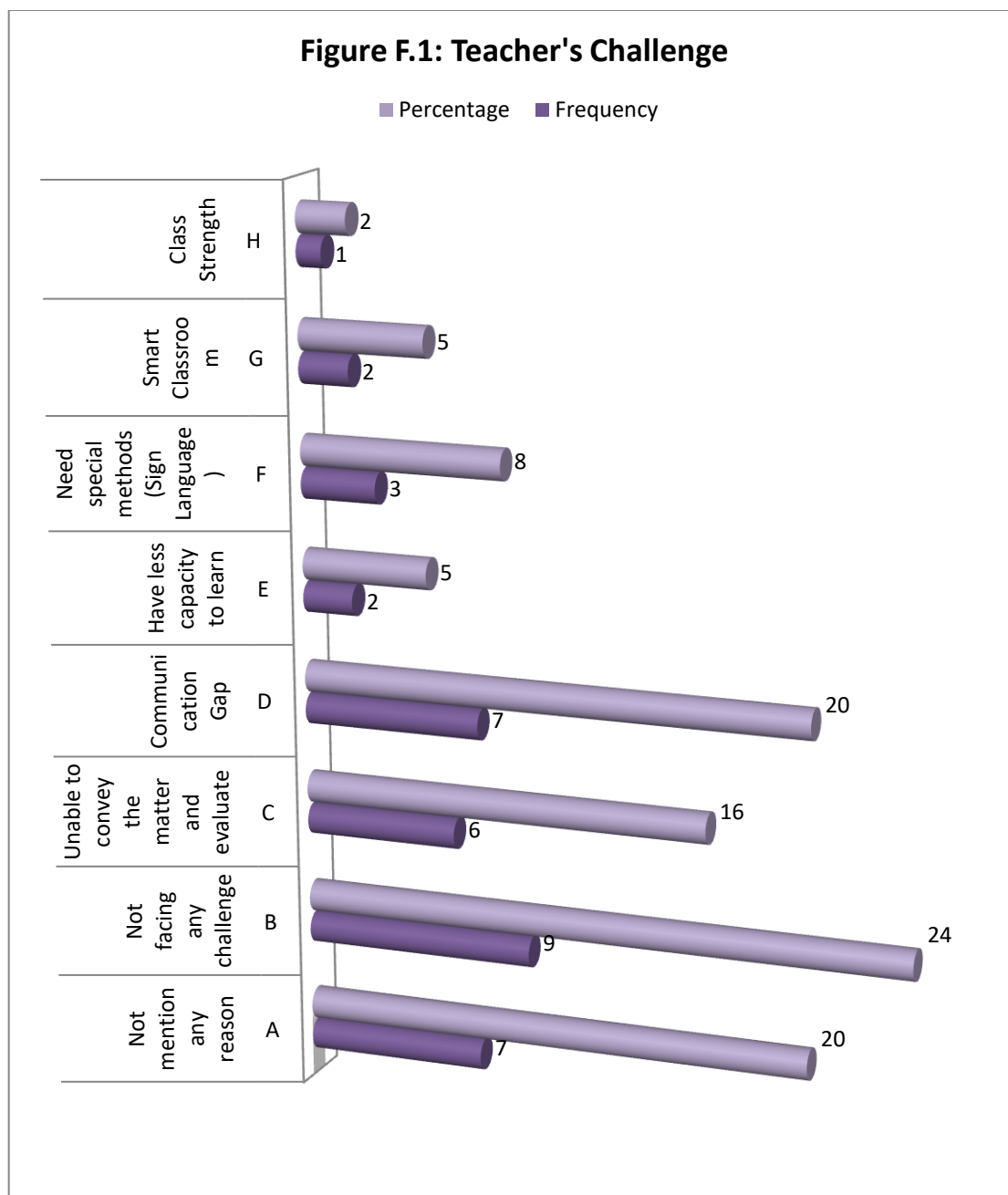
F.2   Difference between the General Classroom and Classroom Having Hearing Impaired Student

Figure-D.3 and Table-D.3 show that eighty-four percent of the teachers accepted that there is much difference between the general classroom and classroom with Hearing Impaired students. Now, here we conclude their answers regarding what kind of issues they face in the classrooms through the Figure-F.2. The Figure shows that 21 percent of the teachers faced challenges but did not mention any reason for that. Another 16 percent of the teachers told me that they do not face any problem

70

during teaching these students. Sixteen percent asked about the special attention and the huge class strength. Thirteen percent of the teachers told me that they do not have any sign language knowledge. Eleven percent of the teachers informed me that they do not have any knowledge regarding the special methodology for Hearing Impaired students. Nine percent of the teachers have been facing challenges due to the lack of special training to teach hearing impaired student. Nine percent of the teachers blamed the institution for not providing any special classroom facility within the school. Five percent of the teachers have been facing problems in providing extra classes to the Hearing impaired student and 16 percent teachers have faced no problem during teaching hearing impaired student.

Figure F.2 : Difference between General Classroom and Special Classroom
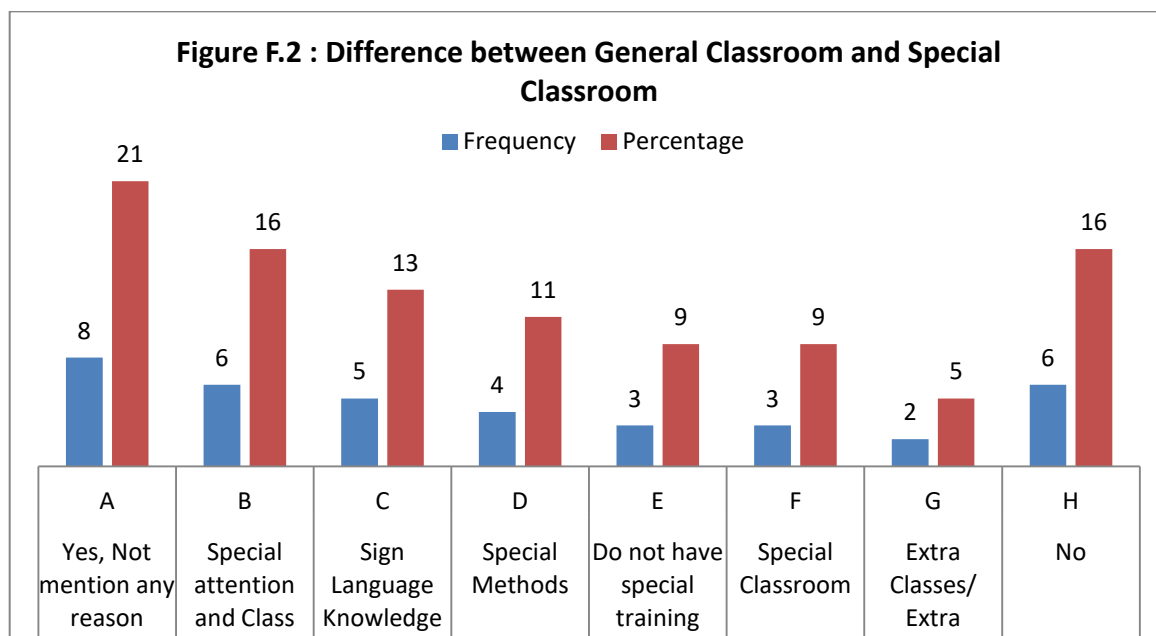
Table F.2: Difference Between General Classroom and Special Classroom			
Difference	**Code**	**Frequency**	**Percentage**
Yes, Not mention any reason	A	8	21
Special attention and Class Strength	B	6	16
Sign Language Knowledge	C	5	13
Special Methods	D	4	11
Do not have special training	E	3	9
Special Classroom	F	3	9
Extra Classes/ Extra Teacher	G	2	5
No	H	6	16

F.3   Facility provided by BRCs

Figure-E.4 shows that 51 percent of the schools get facility from the Block Resource Centres and even that also for hearing machines only. Figure-F.3 shows 39 percent of school heads answered that they do not get any facility from the Block Resource Centres. 31 percent replied that they get facility for hearing aid only from the BRC. 13 percent of school heads informed me that the BRCs conducted sports competition for CWSN students. Another 2 percent school heads reported that the BRCs provided them medical certificates only. Two percent of the teachers reported that the BRCs provide training for few days. Two percent of the teachers informed that the BRCs provide them facility of special teacher. Remaining, 11 percent of the teachers gave me no response.

Figure F.3: Facilities Provided by Block Resource Centre
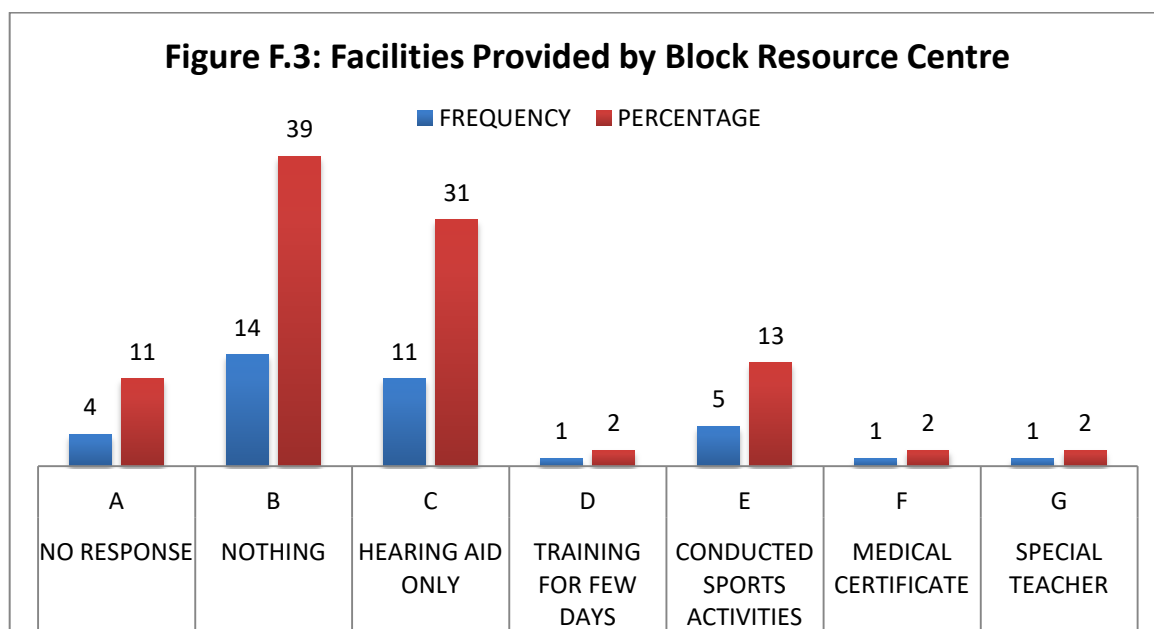
Table F.3: Facilities Provided by Block Resource Centre			
Facilities Provided by Block Resource	**Code**	**Frequency**	**Percentage**
NO RESPONSE	A	4	11
NOTHING	B	14	39
HEARING AID ONLY	C	11	31
TRAINING FOR FEW DAYS	D	1	2
CONDUCTED SPORTS ACTIVITIES	E	5	13
MEDICAL CERTIFICATE	F	1	2
SPECIAL TEACHER	G	1	2

72

F.4   Facilities from the Administration of the School

Figure-F.4 and Table-F.4 show that 33 percent of the teachers want Audio-Visual aids from the administration of the school. Another 19 percent of the teachers needed teaching learning Equipments and Special training for improving classroom teaching skill for hearing impaired students. Sixteen percent of the teachers needed special teachers in the schools so that they can learn things easily.

Table F.4: Facilities Expected from the Administration of the School			
Facilities Expected	**Cod**	**Frequenc**	**Percentag**
NO RESPONSE	A	4	11
DO NOT KNOW	B	5	13
SPECIAL TEACHER	C	6	16
AUDIO - VISUAL AIDS AND SMALL	D	12	33
TLE AND SPECIAL TRAINING	E	7	19
NOTHING	F	3	8

Thirteen percent of the teachers do not know about the special needs of the hearing impaired students. Eleven percent of the teachers gave me no response on this question. Eight percent of the teachers said that they do not need any facility for their hearing impaired students.

Figure F.4: Facilities Expected from Administration of the School
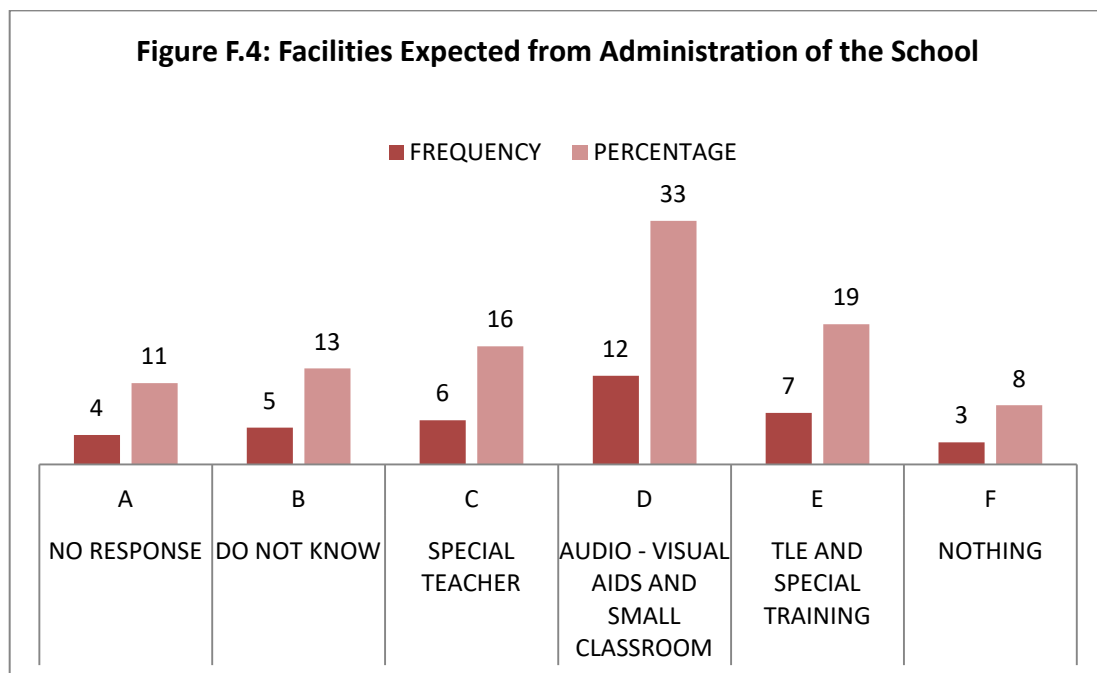
F.5   Classroom Activities for Hearing Impaired Student

Figure-F.5 shows that 22 percent of the teachers have been taking no efforts for the inclusive learning for the hearing impaired students. Sixteen percent of the teachers provide comfortable environment to the students. Fourteen percent of the teachers told me that they do not know about any strategy.

Figure F.5: Classroom Activities for HI Students
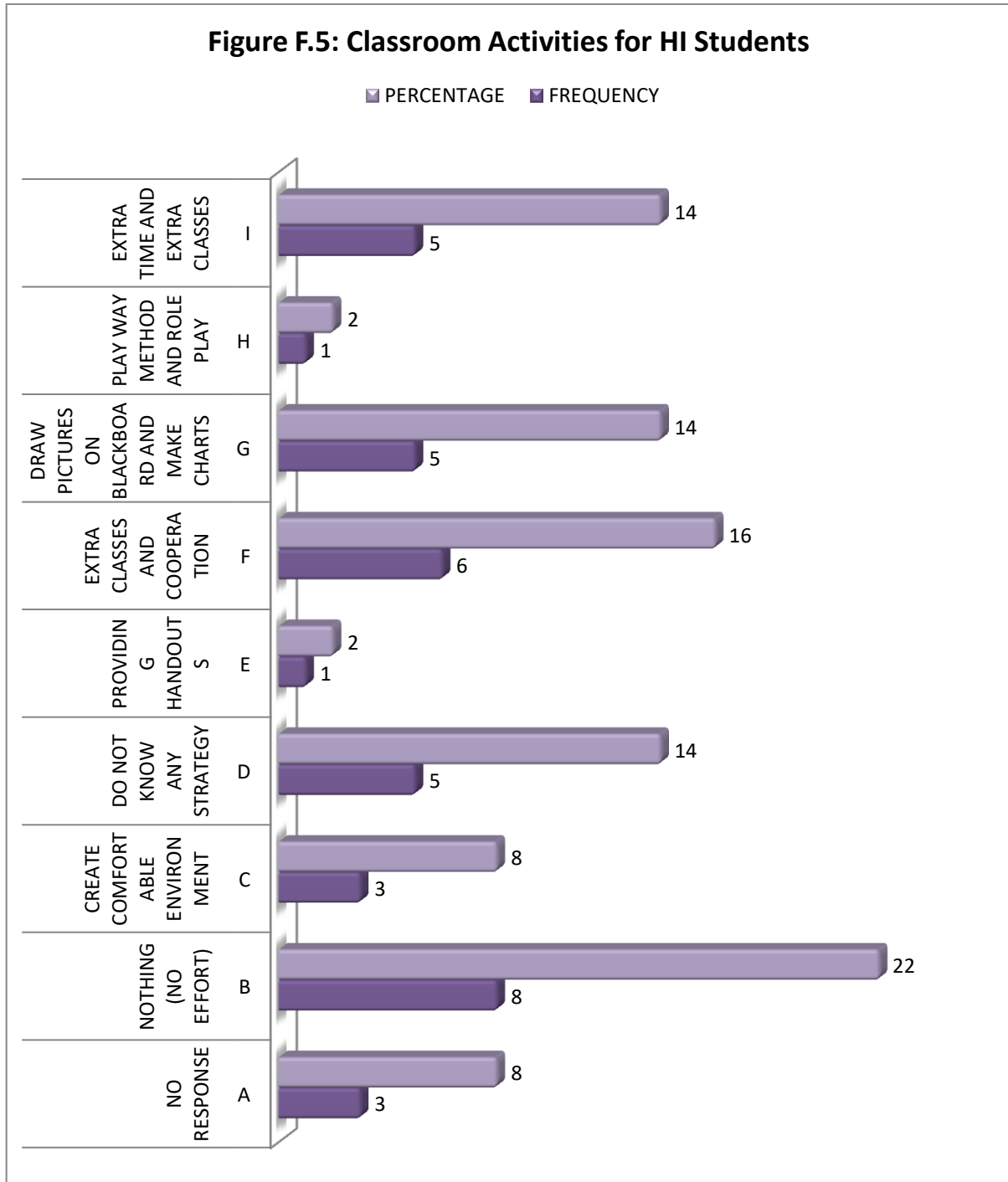
Another, fourteen percent of the teachers told me that they draw pictures and make chart for these students. Fourteen percent of the teachers told me that they provide extra classes and extra time to these students. Another 8 percent of the teachers provide conducive environment to the children. Eight percent of the teachers did not respond to this question.

Table F.5: Classroom Activities for Hearing Impaired Students			
Classroom Activities for HI Students	Code	Frequency	Percentage
NO RESPONSE	A	3	8
NOTHING (NO EFFORT)	B	8	22
CREATE COMFORTABLE ENVIRONMENT	C	3	8
DO NOT KNOW ANY STRATEGY	D	5	14
PROVIDING HANDOUTS	E	1	2
EXTRA CLASSES AND COOPERATION	F	6	16
DRAW PICTURES ON BLACKBOARD &	G	5	14
PLAY WAY METHOD AND ROLE PLAY	H	1	2
EXTRA TIME AND EXTRA CLASSES	I	5	14

G.   Learning outcome of the Hearing Impaired Students

Another way to know about the inclusion of the hearing impaired students is to compare the outcome of the HI students with the other students. For that purpose, we have analyses the average marks of the students in comparison with HI students. Out of the five schools, three schools provide us the marks of the students. This is majorly a quantitative data, which reveals the learning outcome of the students. On the basis of available data, our study finds that the students with hearing impairment have lesser average marks than the average marks of the students. It reflects that the learning of the HI students suffer due to their hearing ability. There are multiple reasons behind their low performance. So, it is very challenging task to ascertain that which reason directly affects their academic performance because there is no particular evidence to prove that how much a particular variable affect their performance. According to our observation the reasons which influence them academically in their studies are mentioned below:

- Communication gap between the teacher and the HI student.
- Students do not have hearing aid.
- There is no ICT for the hearing impaired student.

- Lack of training among the teachers for these students.

- Teachers are not sensitive enough.

- Teacher and student both have no knowledge about the sign language. So how can the students understand the concepts?

- Not a single special teacher recruited in the schools.

- Parents do not want to be involved for the progress of their children.

- No specific teacher learning equipment for HI students.

- Not any specific exam provision for HI Students.

- No specific fund for the children with special needs.

- No special vocational studies for enhancing their life skills.

- Students do not have disability certificates: Teachers do not have any knowledge about the degree of hearing loss of the students.

- Lack of participation of HI students in group activities and programmes.

- Lack of sensitivity among the students towards their hearing impaired classmate.

Figure G.1: Learning outcome of the HI students
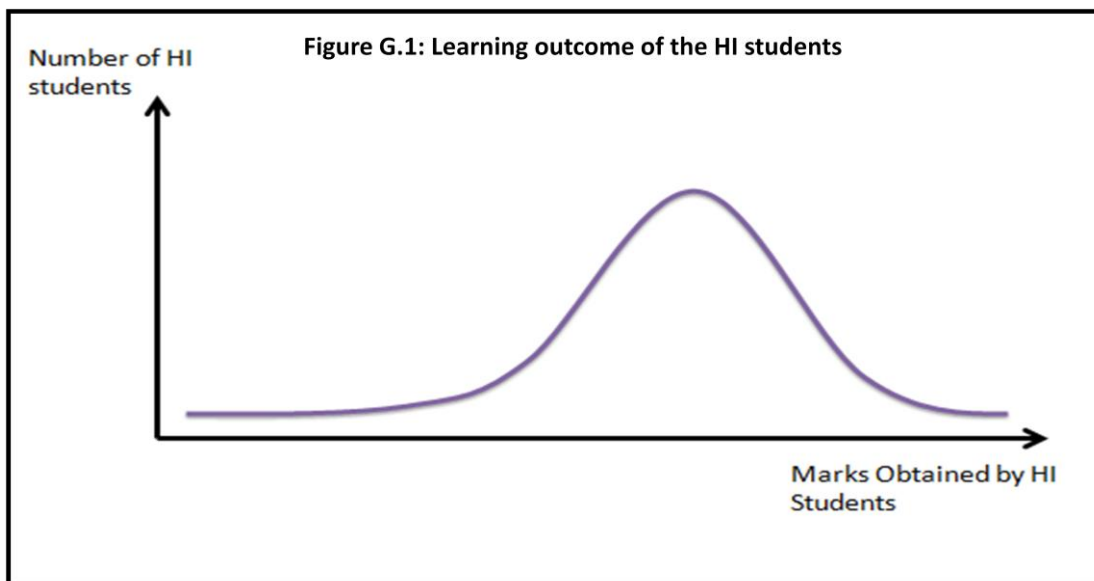
All the reasons mentioned above are responsible for the low learning outcome of the students. We can depict their position with the help of a notionally drawn graph (Graph-G.1) of a negatively skewed distribution. The graph depicts that the learning outcome of the HI students is low as compared to other students.

H. Observations of the HI Students

The children with hearing impairment have a language problem. It is not an easy task to understand and analyse the problems and the challenges they face in their day to day life. So, the only available option is to observe them in the classrooms to understand and analyse about their problems. We have observed thirteen students from five different schools in our study. We tried to work on the elementary level but due to very less enrolment of HI students and simultaneously lack of time we had to work on primary level also. Out of the thirteen students, we obtained the marks of eight students for analysing the learning outcome of the HI students. The details of the learning outcomes of the hearing impaired students are explained in the case studies and remaining details can be discussed further:

1. **Khusboo**

Khusboo is a very little girl and she studies in class 3rd but she can grasp many things at the same time. She is very

---

Box4.1: Case Study of Student

Arjun is not comfortable to talk anyone. He does not even convey what he wants to say to other students. Only 3 to 4 students understand what he need or want to say because they sit nearby him. Arjun Studied in Class VI G and remain quiet most of the time. He is not active during the class and with his friends. Although, His notebooks remained complete. His all notebooks are well maintained and checked. But, He is little bit unsocial with his classmates. He does not have hearing aid. The teachers are also not aware that how much hearing loss he has. So, the condition of that child is not good as compared to other hearing impaired students.

Arjun

■ Hindi

15 — Average Marks of Class VI G
13 — Arjun's Marks

---

active and possessive about her things like pencil and notebooks. She wears hearing aid but does not know how to operate it. We did not observe any significant effect of
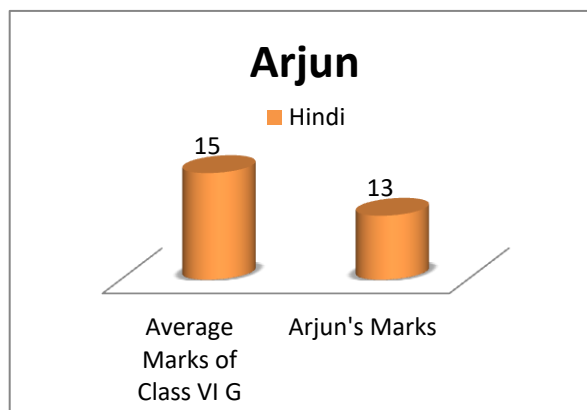
hearing aid on her hearing capacity. She felt awkward when we tried to talk to her. She is just like a blank slate or like a small baby who do not know about anything.

2. **Tinku**

Tinku is a very naughty boy. He studied in class 5th. His class teacher is very cooperative towards him. He does not have any hearing aid and he talks to his

---

Box 4.2: Case Study of Students

Neha & Payal

■ Maths ■ Hindi ■ English

Avergae Marks of Class VI A: 16, 17, 17
Neha's Marks: 14, 9, 9
Payal's Marks: 0, 11, 11
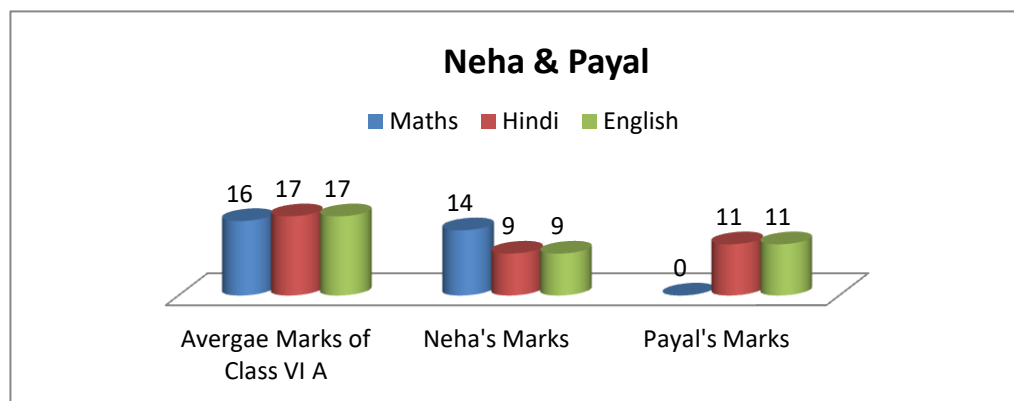
Payal is active girl and studies in class VI A. She is able to hear voice with the help of hearing aids. She wears hearing aid in both of her ears. Her hearing aids are also new because, she got them just one day ago. She could catch, whatever we asked, with the help of that hearing aids and that is a good sign.. She tries to understand things very keenly like a small child and tries to communicate with other students with some broken words. She can improve her speech ability provided she gets some support. Her class performance is lower than other students. She got lesser marks than the average marks of the students.

Neha is very quiet girl. She studies in Class VIA in Govt. senior secondary school, Raira Kalan. She remains quiet most of the time and rarely interacts with her classmates. She is unable to pronounce even her name but tried to copy us when we asked her to spell her name. She doesn't have any certificate for hearing loss but she wears hearing aids in both ears. She does not know how to operate her hearing aids. Even her teachers were not aware about the abnormal pesky sound created by that machine which was audible outside. She does not respond to any voice. She silently copies whatever is written on the board without understanding anything. Her marks are lower than average marks of the class but she is good in Mathematics as compared to other subjects.

---

friends through facial expressions and hand gestures. He started crying when I talked to him and his class teacher. He feels very much insecure. His hesitation to talk to us depicts that he cannot accept any changes very easily. The teacher's perception about Tinku is that he should be transferred to special schools so that he can get all facilities for his development.

3. **Ajay**

Ajay is very sporty and a naughty student. He studies in class 10th and he is always ready to participate in any activity. He remains the winner in running competition at the district level but he has not yet participated at the state level due to the ignorance of his parents towards him. According to the teachers, the parents have no involvement in the upliftment of their child. They do not pay any attention to these children and do not even participate in parents teachers meeting.

Box 4.3: Case Study of Student

Laxmi

■ Average Marks of Class VI A   ■ Laxmi's Marks

	Hindi	Science	Maths
Average Marks	15	16	13
Laxmi's Marks	8	11	8

Laxmi is aggressive and naughty in nature. She studies in class VII A at GSSS Kadipur. She is hyperactive and remains engaged in work all the time. She is always busy writing in her note book. She does not have any hearing aid and certificate for hearing loss. So we do not have any idea about her level of deafness and her teachers are also ignorant about her level of hearing loss. She communicates with other girls with some broken words and facial expressions. She tries to notice that nobody complaints against her to the teachers. She scores average marks relative to average marks in the class.

4. **Preeti**

Preeti is enrolled in the school as a mentally challenged student though she has only hearing disability. The school records mentioned her as mentally challenged even though they know that she is only hearing impaired. She has remained absent
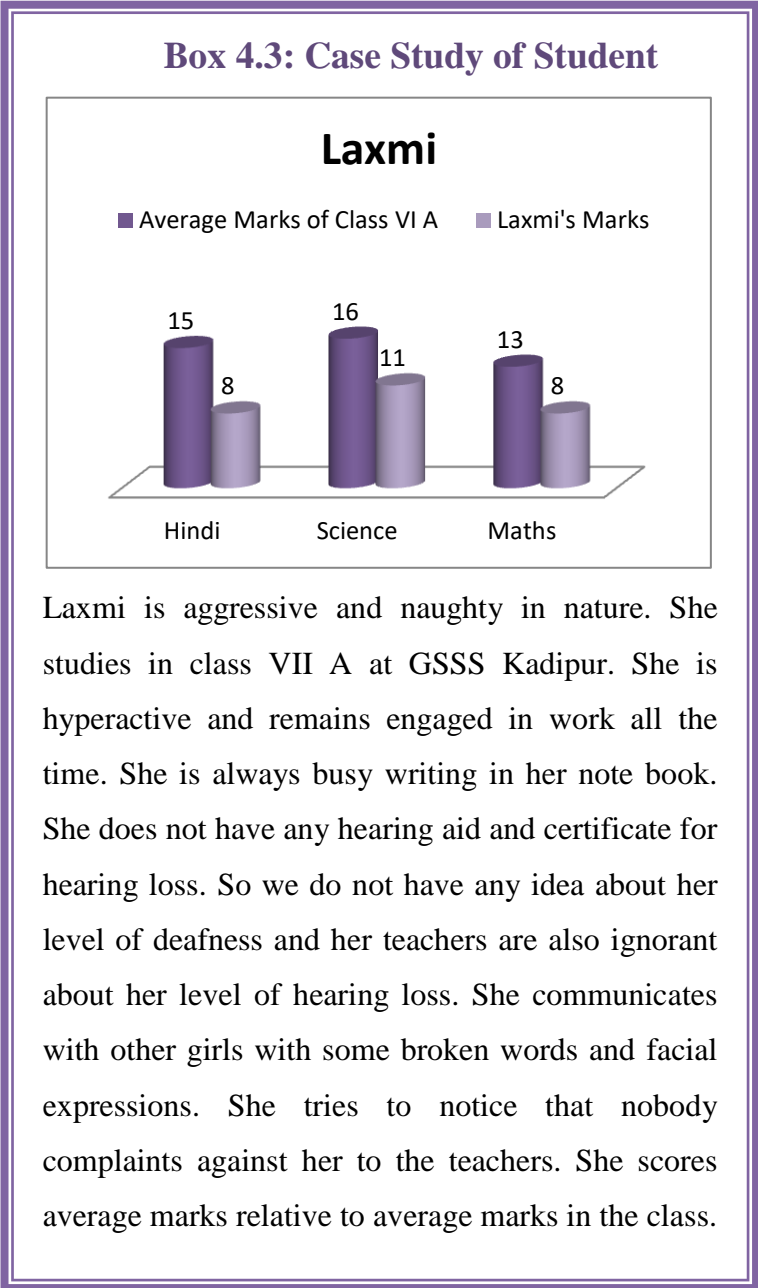
from the school for a very long period of time. Even the teachers have no information regarding her absenteeism.

5. Soni

Soni studies in Class IV. She is very furious in nature and does not even follow the instructions of the teacher. She follows the instructions of her friend only. She is very unsocial in nature also. Her activities during the class disturb other students also. She is not ready to accept any change in her time table. The class teacher conveyed us that she is very hyper active child and he faced very difficulty due to her presence in the classroom.

6. Sukhchain

Sukhchain is very studious child of his class. He studies in class 11th. He is average in studies but always remains keen to understand new things. He has interest in computers also and most of the time he works on computer in school. He is

---

Box 4.4: Case Study of Student

Sagar

■ Maths ■ Science

22 22
20 20

Average Marks   Sagar's Marks
of Class VI A

Sagar is very hyper active. He cannot even sit on one sit during the class. He studied in class VIA. He is regular in school but have naughty behaviour towards the teachers. He does not have any hearing aid and cannot able to listen anything. He just understands things with the help of facial expression and hand movements. He is always engaged in doing some acts to irritate others. He used his energy to do negative things rather than to do positive one. But he is average at studies according to his marks. He got average marks in the class test which is not real according to his performance. He is not even able to write his name. But teachers bound to provide them passing marks as per the school guidance

---

also good in sports and participated in many sports activities.

Other students of our study are represented in a case study form.

I.   Policy Analysis

Curricula of the RCI and NCTE have provisos for Pre-service and In-service training for teachers. Rehabilitation Council of India is the apex body set up under an Act of the Parliament of India to regulate training programmes and courses targeted at disabled, disadvantaged and special education requirement communities. RCI is the only statutory council in India that is required to maintain the Central Rehabilitation Register which mainly documents details of all qualified professionals who operate and deliver training and educational programmes for the targeted communities. In the year 2000, the Rehabilitation Council of India (Amendment) Act, 2000, was introduced and notified consequently by the Government of India. The amendment brought definitions and discussions provided within the earlier Rehabilitation Council of India Act, 1992, under the ambit of a larger act, namely, Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.

Box 4.5: Case Study of Student

Rahul is also very active child. He studies in class VI B. He has very funny nature. He smiles all the time. Other students of his class also support him in completing his school work. He can write the names of his classmates and also tries to pronounce them but he is unable to speak anything. He is good at sports and gets position in long distance running competition. He is also good in Kho-Kho game but never gets any opportunity to perform at district level. He does not have certificate of hearing loss and any hearing aid. So teachers are not aware of his degree of hearing loss. He gets average marks in the class that too because teachers are bound to provide them at least average marks to maintain the reputation and overall result of the school.

Rahul

■ Maths ■ Science

	Maths	Science
Average Marks of Class VI B	22	21
Rahul's Marks	20	20

I.1   Pre Service and In Service Teacher Training
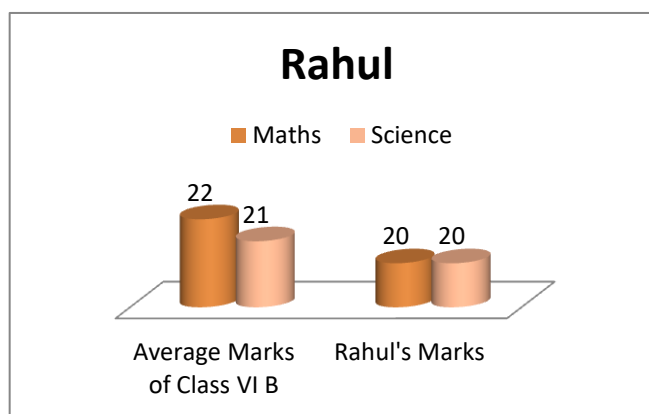
We will assess the RCI and NCTE curriculums in imparting skills to the teachers and how these training curriculums make teachers efficient for inclusive education. The basic study is to analyze the RCI and NCTE Curriculums for the training of teachers. Following are the aspects on which we will analyses these documents:

- **Pedagogical Skills:** RCI provides an extensive course in its curriculum for the particular disability. The course is introduced to the student teacher separately with each aspect of the disability. The pedagogical skills are introduced in the curriculum as a separate course in which the student-teacher know about the importance of auditory and listening speech reading for facilitating development of spoken language of children with HI. The course also encourages them to introduce strategies for speech interventions and communication linkages with the outcome of educational interventions.

Box 4.6: Case Study of Student

Shivani

■ Maths

14

5

Average Marks of Class VI B   Shivani's Marks

Shivani is a very shy girl. She studies in class VIB. She remains calm and quiet most of the time. She sits alone in the class or we can say does not have any interaction with other students. She looks pretty clean as compared to other students. She does not have hearing aid but she is able to dance on loud music. In fact, she is a very good dancer and got many award in dancing. The dance teacher informed me that Shivani is very keen to learn dance and she grasps things very fast as compared to other students but she is not good in study. She got very less marks in comparison with the average class marks. She would be good dancer if she gets support from teachers and parents.

- **Communication Skills:** RCI imparts the knowledge to student teacher for early identification of hearing loss and also about the communication and language related needs in its course structure. These also include the assessment of speech for the hearing impaired students.

Box 4.7: Case Study of Student

Ankit

■ Average Marks of Class VI B ■ Ankit's Marks

	Maths	Hindi	English
Average Marks of Class VI B	15	17	16
Ankit's Marks	15	13	10
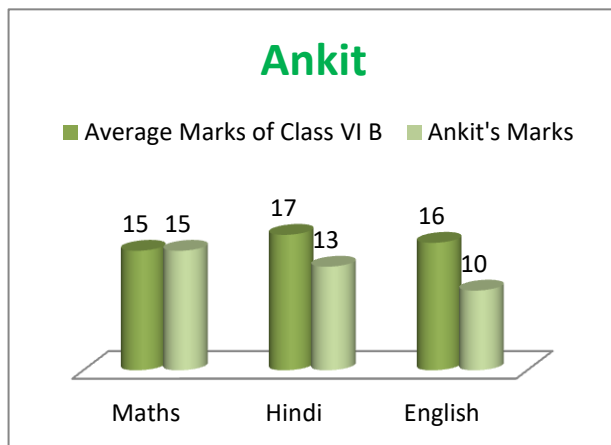
Ankit is very naughty child. He studies in class VIB. He has hearing aids but does not want to wear that because he feels uncomfortable after wearing the hearing aids. He told us that the hearing aids create pesky sound in his ears and cause lot of headache to him. He is very active and good at dance also. He also likes to participate in sports. He has got awards in running and drawing. He has many abilities which can make his life worthy but for that he needs proper instructions and special guidance which will help him in achieving better outcomes. He talks with some signs and head movements and prefers to communicate like that only. He is good in copying from the board but gets lower marks in class test as compared to other students. He is good in Mathematics, so he gets average marks in that test.

- **Teachers Attitude:** the RCI also take care about the sensitivity of the teachers as well as the other community members towards the person with disabilities. For that purpose, RCI conducts course on Socio-psychological issues for the student-teacher so that they can be make the stakeholders of that child aware for being sensitive towards them as well as the coping measures to deal with stress.

- **Adaptation to Curriculum:** the student teacher understand the need to modulate the curriculum for the children with special needs with the help of the curriculum designing course meant for hearing impaired students. The

students have to be evaluated differently because they have different kind of potential to perform so the teachers have been informed about the evaluation method to be used for these children

- **Use of ICT and Other Aid**: Technology and Disability course of the curriculum extensively deal with the technological aspect for the hearing impaired students. The teachers can accumulate all knowledge regarding the technology which is beneficial for the students with hearing loss.

I.2 Pre-Service Training

RCI and NCTE have explicitly mentioned in their curriculums about the periodical conduction of in-service training for updating professional knowledge of the teachers but there is no specific course content for the in-service training in the curriculum of RCI.

National Council for Teacher Education (NCTE) is a statutory body of Indian government set up under the National Council for Teacher Education Act, 1993 and established in 1995 to formally oversee standards, procedures and processes in the Indian education system. This Council functions for the central as well as state governments on all matter with regard to the Teacher Education and its secretariat is located in the Department of Teacher Education and National Council of Educational Research and Training (NCERT), New Delhi. Despite the successful functioning in terms of educational field, it is facing difficulties in ensuring the maintenance of the standards of teacher education and preventing the increase in the number of substandard teacher education institutions in the country.

- **Pedagogical Skills:** the NCTE Curriculum follows many government policies and documents which describe the learning as a part of life. Education is not only meant to collect degrees but to empower the students towards critical thinking and logical reasoning. The teachers' role is described here as a Guide who provides direction to the students to achieve their potential by using creating activity.

- **Communication Skills:** NCTE talks about the overall development of the children. So, communication skills are also part of the teacher education. Group activities enhance the communication skills of the children. The role of teacher as mentor provides child to express their views freely through which the child would be motivated and perform well.

Chapter-Five

Conclusion and Policy Recommendation

T he concept of inclusion is not new in the Indian Education system. In India it is evident from many government programmes and policies that the process of imparting special education has been brought into practice for quite a long time to ensure inclusion and social integration of all. Recently, in the Union budget of FY 2018-19, the Government of India introduced an ambitious mission called *'Samgrah Shiksha Abhiyaan (SSA)'* to ensure equity and inclusion at all level of school education in the country.

The ideological debates at national and international level, over the education for all and particularly for children with special educational needs, have not only lent credence to the moral concerns but also provided credible intellectual inputs and a big push to the development of firm legal and institutional foundation in India. The Salamanca statement and Education for All movement of UNESCO, SDG-4 and Incheon declaration of the UNO have proved crucial levers in taking forward the inclusive education policy agenda at the global level. The enactment of the Right of Children to Free and Compulsory Education Act, 2009, Persons with Disabilities Act, 2008 and The Rights of Persons with Disabilities Act, 2016 have proved to be important milestones in the direction of attaining inclusive education for all.

In spite of serious and concerted efforts in the form of a sound inclusive education policy framework, legal mandate and a number of policies, schemes and programmes the ground reality of inclusive education in India does not seem to have changed much. The question of a how successful India is in achieving inclusive education for all has not been examined at the ground level. As we go through the available literature, we come across a number of empirical and non-empirical studies in India and abroad. In India, very few studies are conducted, that too at the individual level, to assess the progress of the inclusive education policies and programmes at ground level and particularly so for Deaf and hard of hearing students in India. Thus a lack of such studies for Deaf and hard of hearing students is visible in the available literature on inclusive education.

In this backdrop, the present study has been conducted to assess the extent of inclusion of students with hearing impairment in the schools of Haryana state using structured questionnaire and observation methods. The questionnaire has both 'close ended' and 'open ended' questions which help in drawing the conclusion quantitatively and qualitatively. The major part of the findings is based upon the quantitative responses of the teachers. The study also examines the learning outcomes of the students on the basis of their class test marks relative to the average marks in the class.

Findings of the study are grouped in five parts. The first part derives conclusion from the quantitative responses of the teachers; the second part derives conclusion from the qualitative part of the responses of the teachers; the third part deals with the students learning outcomes; the fourth part is the observation of the students to acknowledge their interests and participation in the classrooms and finally the fifth part pertains to the analysis of the guidelines of Rehabilitation Council of India and National Council for Teacher Education.

The study finds that the teachers have great efficiency in terms of qualifications and work experience but they do not have proper training for dealing with the hearing impaired students. As the data in the study reveals that about seventy three percent of the teachers have a minimum of Post Graduation and B.Ed. qualification and about sixty three percent teachers have teaching experience of more than 10 years. This reflects tremendous capacity and efficiency for adaptation and expertise for an inclusive educational environment but the flip side of the issue at hand is that eighty four percent of the teachers have not received any training, neither during pre-service and nor during in-service trainings, for imparting education to the hearing impaired students in an inclusive manner.

The fact of the matter is that the mere academic qualifications and general teaching education degrees do not enable them to address the needs of the hearing impaired students in the classrooms. Thus teachers by and large are ignorant about the attributes of the hearing impaired students and therefore, they need proper training to understand the requirements of these students to creative an inclusive environment in the classroom. Communication is the most challenging impediment for the hearing impaired students in their classroom learning and involvement in the school. The lack of proper language knowledge skills make them vulnerable in the classroom in many aspects. So, the teachers need more skills, training and information on the disabilities

to deal with the problems and needs of hearing impaired student in comparison with the students with other forms of disabilities.

As we stated earlier, the need of the training of the teacher play a very important role in the inclusion of hearing impaired students in schools. This statement has been corroborated from the evidence obtained in this study using the other set of data which pertains to the knowledge of the teachers regarding the basic information of Hearing impaired student. The study finds that ninety seven percent of the teachers do not have any knowledge about an Individualised Education Plan which is meant for the overall development of the child with special needs. This Plan covers not only an assessment of the academic progress of the child but also includes the motor development, social development and communication development. The eighty six percent of the teachers have no knowledge of even about the degree of hearing loss. The RPwD Act, 2016 specifically mention in *Samagrha Shiksha Abhiyaan* mandates to provide all assistive devices to the HI students but the students and the teachers have no knowledge about how these assistive devices operates. This is evident from the data that eighty six percent of the teachers have no knowledge regarding the operation of hearing aid. Other important requirement is that the teacher dealing with the class having hearing impaired pupils should have some knowledge of sign language, so that the teacher can communicate with that such children. The study finds that not only the students have no knowledge of sign language but eighty six percent of teachers also do not have any knowledge of it.

The RPwD Act (Specific part of SSA) necessitates that the children with disabilities should get some relaxation in exam. The hearing impaired students also get some concessions in exam provisions in terms of choosing one language and in writing descriptive answers because they have known issues with language and sentence formation. The data shows that eighty one percent of the teachers showed their ignorance by accepting that there is no specific exam provision for the hearing impaired students. The teachers are unaware about the policy for children with special needs. So, it is obvious that they are also not informed about the policy measure of Hearing impairment. The percentage of teachers who have no knowledge regarding any policy related to HI students is surprisingly ninety two percent. Assistive and amplifying devices can make learning easy for the students with hearing loss but unfortunately they neither get any assistive device nor do their classrooms have any amplifying. Ninety seven percent of the teachers are not aware about those devices.

Another important way of inclusion from the teacher's perspective is the teaching strategies for making classroom inclusive. A student with hearing impairment needs more attention for which teachers can use some strategies. Audio and video contents during the classroom instruction may be very effective. The teacher have to use more and more audio video aids to deliver the content in the classroom and to take care of the needs of the students having hearing impairment. The teacher also has duty to ensure that the all the students are able to learn in the classroom. The study shows that thirty five percent of teachers assure that the students pay attention and learn in classroom. Since the HI students have issue with understanding the content due to language problem, so they need to be given extra attention and time. Eighty one percent teachers in our study provide extra classes to these students in spite of their busy work schedule. On the other hand, sixty two percent of teachers also tried to convey the content through different classroom strategies.

The teachers have positive attitude towards the hearing impaired students but they also think that the HI students should be enrolled only in special schools. The only reason behind such view is the conception that the special schools have more facilities for these children where they can get better opportunity to learn and develop. The students with hearing loss learn things mostly through their visual senses wherein the role of handouts is important in their learning. The data shows that seventy three percent of teachers do not provide any handouts to the students due to lack of time. The PowerPoint presentation facility which is nowadays very common in the urban areas is still rarely available in the rural areas let alone the availability of smart classrooms. Seventy percent teachers reported that there is no facility of PowerPoint presentation at their school. The RPwD act recommends for the recruitment of special teachers in the mainstream schools or at the block level to meet the needs of the students with specific needs. No special education educator or teacher is deployed in the sample schools for hearing impaired students and the teachers recruited at the block level do not give classes to HI students.

A teacher without prior training for inclusive education faces challenges in the classroom. Eighty four percent of the teachers accepted that they face challenges in the classroom due to the presence of hearing impaired student. Eighty four percent of the teachers reported that there is a huge difference between the general classroom and the classrooms with hearing impaired students. Even though the teachers provide

them extra classes but still sixty five percent of them are unable to convey the content to the HI students.

Samgrah Shiksha Abhiyaan recommends for the provision of all essential teaching learning equipments to the teachers to impart quality education to all students. It is evident from the data in our study that eighty four percent of the teachers are not getting any kind of teaching learning aid from their institutions. Even, the Block Resource Centres provide only hearing aids to the students in the name of assistive devices. Fifty one percent of the teachers reported that hearing aid helps but it is not sufficient for the students with hearing loss to learn properly.

Inclusive education provides a platform to remove all the biases among children. It envisages a place where children can develop without any prejudice and discrimination. The inclusion is not possible without the availability of adequate funds. The data showed that ninety five percent of the heads of the schools do not get any fund for the CWSN students and there is no provision for any specific budget for hearing impaired students.

The other part of the study which pertains to the qualitative part of the questionnaire represents the challenges of the teachers in teaching HI students due to the lack of training and large classes, differences in the classroom with or without HI students, facilities from the Block Resource Centre, type of assistance teachers require for the HI students and methods they adopt for the HI students in the classroom. Thirty six percent of the teachers face the communication issues and find themselves incapable and helpless in conveying the content knowledge due to no knowledge of sign language. The average class strength is sixty in most of the schools which poses extra challenges for the teachers and therefore teachers do not have enough time to provide special attention and extra time to the HI students.

Block Resource Centres do not provide any facility to school's teachers. Thirty nine percent of the teachers reported this while thirty one percent reported that the BRCs provide only the hearing aids to the students. As a matter of policy implementation, under SSA the Block Resource Centres have to impart in-service training to teachers, provide academic support to teachers and schools on a regular basis and help in community mobilization activities. However, in reality the role of the BRCs has been decimated just to provide only the hearing aids to the students.

The Block Resource Centres as well as the SCERTs of states are responsible to provide teaching learning equipments to the teachers and to upgrade their

knowledge with the current educational technologies so that they can enhance the quality of education in the schools but the study finds that the teachers have no teaching learning equipments and the BRCs do not support them. Teachers require audio-visual aids, special training, special teacher for hearing impaired students and teaching learning equipments to teach the HI students.

Although most of the teachers have been found to be sensitive towards these students yet some of them do have very negative attitude. In our study twenty two percent of the teachers do not put any specific efforts to teach these students. They are prejudiced with the notion that the HI students have less capacity to learn. They argue and question that they do not get enough time to teach even the normal students so how can they provide special attention to them. A little more than one third of the teachers provide extra classes and make sure that HI students sit on the front seat in the classroom. Although these are commendable strategies yet the duty of the teachers is not fulfilled just by giving extra time and altering seating arrangements favoring the HI student. Rather they should ensure that ultimately it is the learning of the HI students which is fundamental requirement of inclusive education. A small fraction of fourteen percent of the teachers has no idea as what strategies to adopt in the classroom for the HI students.

Third part pertains to the learning outcomes of the hearing impaired students as compared to the other students. The average marks of the hearing impaired students are found to be lesser than the average marks of the class and there is no special provision for evaluating HI students. They are evaluated on the same test as for the other students. It is farcical and unjustifiable to expect higher marks without fulfilling the basic needs of the HI students.

Fourth part is about the general observation of the students. In the absence of proper communication and language ignorance, observation has been used as method to trace their problems. We could assess their strengths and weaknesses just by silently observing them. The observations of the HI students with their marks have been represented in the study using case study method. Out of the thirteen HI students under observation, seven (six boys and one girl) had participated in sport events at the district level and they had secured positions also. In fact, the hearing impaired students have potential for sports and extracurricular activities but they do not get opportunity to perform at the higher level due to ignorance of the administration and the attitudes of their parents towards them.

Fifth part emphasizes on the training curriculum of the Rehabilitation Council of India (RCI) which has been developed exclusively to meet the needs of the disabled children. The study finds that RCI, in its curriculum, provides specific courses for each disability in detail and trains teachers for meeting the requirements of the children with special needs. Our study focused on the pedagogical skills, communication skills, teachers' attitude, adaptation to curriculum, exam provision for hearing impaired students and the use of ICT and other aids in the RCI curriculum for assessing the training of the teachers for imparting inclusive education to the hearing impaired students. The analysis of the curriculum shows that the RCI has developed a proper curriculum schedule for the teachers to meet the needs of hearing impaired students in every respect. RCI even organizes in-service training for the teachers to update their knowledge of the technologies but there is no specific information available on the content of in-service teacher training program.

National curriculum framework for teacher education (2009) emphasized on the improvement of pedagogy and to update teachers about the available technologies. The National Council for Technical Education (NCTE) provides pre-service and in-service trainings to the teachers at the national and the state level. Unfortunately a huge majority of the teachers (about eight four percent in our study) have not received any such training for teaching the hearing impaired students. Hence we can firmly say that the ground reality is often much different from the intent of the policies in place.

Overall, we can conclude that the study assesses the inclusivity with respect to the learning outcome of HI students and the knowledge of teachers about the HI learners. The study shows the finds about the awareness of teachers for HI students and it reflects upon the kind of strategies teachers use to promote their learning. Major loopholes in the inclusion for Hearing impaired students are unavailability of resources and the lack of training for teachers to develop the HI students. Apart from that, classroom infrastructure is also not arranged as per the special needs of the HI learners. So, there is great difference between the policy mandates for HI students and the ground reality of inclusive education in the mainstream education system in the Government run schools in Haryana. The implementation parts of the policies, which are exclusively designed for the overall development of the children with special needs by the Central and State Government, is drastically lagging behind. In addition, the policies should include empathetic provisions for the hearing impaired students.

Policy Recommendations

The present policy on inclusive education does not clearly outline the responsibility of regular education teachers in teaching the students with special needs. Teachers in inclusive schools need continual training programs in order to update their knowledge and increase their skills in using creative teaching methods, integrating technology, and providing appropriate curriculum and instructional accommodations for their students. With the new movement, *Samgrah Shiksha Abhiyyan*, the Ministry Human Resource Development (MHRD) should provide training programs and workshops to all teachers regarding special education and regular education to give equip the teachers with knowledge and skills that are essential for inclusive education. The MHRD may create a program that selects distinguished teachers and sends them to Finland, Australia, and Europe for two weeks to visit inclusive schools in such developed countries where inclusive education is in its finest form.

In addition to that, the government may provide for inter-state school visits of teachers for gaining knowledge about inclusivity as practiced at different levels of schools in different states. It is highly important for these teachers to gain first-hand exposure and experience of successful models of inclusive schools and bring this valuable experience to the Indian schools.

Additionally, MHRD needs to offer programs and workshops to teach regular teachers a basic level of sign language. These programs should be offered for teachers who are willing to work with Deaf and hard of hearing students. Teachers who participate in such workshops might be given some additional privileges or incentives to encourage more teachers to do so.

Apart from that, there may be a rewards program to attract more people to learn sign language and work as interpreters. The role of interpreters in inclusive education is vital. They can play a key mediating role in the communication between Deaf and hard of hearing students and their teachers particularly in cases where teachers do not have adequate sign language skills.

Preparing the Physical Environment

An important finding of the present study that was outlined as a suggestion by the teachers was to modify the physical environment in the schools to meet the special needs of Deaf and hard of hearing students. According to the teachers, regular public

schools currently do not accommodate the needs of Deaf and hard of hearing students. Regular schools should alter their physical environments to be more accommodative, welcoming and accessible for all students, including disabled and particularly those who are Deaf and hard of hearing. For example, Deaf and hard of hearing students are often visual learners and therefore, the schools should offer visual aids throughout the building (including sport courts, playgrounds, and the cafeteria) and particularly inside the classrooms.

There are many types of visual assistance that schools can provide, such as flashing alarm lights that could go on whenever the bell rings, TVs and videos with captions, posters and smart boards with captions. The schools should be equipped with a noise reduction system and a FM system to assist students with hearing aids to hear sounds and communicate effectively. The physical environment should accommodative considering all details, including where a student can sit and how the desks and chairs are organized.

In short, the school structure and system must eliminate all physical barriers that prevent Deaf and hard of hearing students from communicating and interacting effectively with their peers, teachers, and other individuals in regular schools. Complete inclusion must aim to help Deaf and hard of hearing students to be active participants in all school events and activities. In this direction the first step should start with the creation of an enabling environment that is welcoming and safe.

Teaching Strategies and Curriculum

In the study, many teachers revealed their inability and lack of confidence to impart education to Deaf and hard of hearing students in regular classrooms. Teachers will have more favourable attitude towards complete inclusion in regular classrooms when they are confident about their skills and knowledge for teaching Deaf and hard of hearing students and they will most likely believe that the regular classrooms are the most appropriate for the Deaf and hard of hearing students. In fact, in inclusive schools teachers face a number of challenges such as responsibility towards large number of students, standardized class tests and accommodating students with disabilities and therefore they need to select instructional strategies and methods that cater to the classroom diversity in the best possible manner. However, these methods must be appropriately validated and adequately supported by research evidence. Apart from that these methods also need to be universal or differentiated to provide access to the general curriculum to all students.

Further, teachers in inclusive schools need to be researchers, learners and problem solvers who explore new innovative methods of instruction and validate them with research evidence. The implementation of curricula adaptations and effective classroom practices may allow greater access to the general curriculum to all children and may also boost student performance. In addition to it, many teachers in the study reflected lack and need for special education teachers in the schools to supplement the efforts of the general education teachers in imparting education to the Deaf and hard of hearing students. Despite the fact that collaborative teaching is missing in Indian schools, this is a genuine concern. A special educator can definitely supplement the general educator inside and outside of the class. A special educator can consistently help in aligning the teaching instructions to suit the requirements of the Deaf and hard of hearing students. He/she can assist such students after the class in learning the class content and in developing communication skills.

Assessment in inclusive education should focus on each student's learning progress rather than meeting curriculum-based standards. In addition to the teachers' effort, the MHRD needs to develop a curriculum that is appropriate for all students and endorse the teachers' efforts to accommodate instructions and assessments for Deaf and hard of hearing students. Furthermore, traditional assessment and evaluation process requires lot of time at the cost of teaching and learning and it fails to reflect the actual progress made by the student. In this regard also, students with hearing impairment face a very high risk of failure in regular classrooms because they learn the general curriculum the assessment of which does not accommodate their needs. Therefore we need to innovate and design more authentic assessment methods which can meet the needs of Deaf and hard of hearing students.

The aim of inclusion within the school is not fulfilled merely by providing the assistive devices and training to the teachers. A school is an institution where multidimensional development of students takes place and overall development of the students is influenced by many factors and these factors influences the special needs children more than the normal one. Hearing impaired students face strenuous challenge of language disability which is an outcome of their hearing loss. Their language disability makes them highly susceptible to failure in their academic pursuits and vulnerable from social and emotional aspects. So, there is great need to develop a curriculum where the normal students can also learn the basic sign language. The notion of inclusion is only achieved when the efforts are put by the both ends. Normal

students need to remain empathetic towards the HI students and provide them an environment where the HI students act as participants and not as passive spectator.

Although the study is conducted at a small scale yet it offers vivid conclusions and highlights the intense need for a large scale extensive study encompassing a large sample size wherein the domain can be expanded by including the parental role also in the development of HI students.

Bibliography

Ahmad, W. (2012). *Barriers of Inclusive Education for Children with Intellectual Disability*. Indian Streams Research Journal, (2), 1-4. Retrieved from: http://connection.ebscohost.com/c/articles/86683159/barriers-inclusiveeducation-children-intellectual-disability.

Ahuja, A. and Ibrahim, M (2006). *An assessment of inclusive education in Bangladesh*, UNESCO, Dhaka

Ainscow, M. (2001). *Understanding the Development of Inclusive Schools*, the University of Manchester.

Ainscow, M., Booth, T., and Dyson, A. (2006). *Inclusion and the standards agenda: negotiating policy pressures in England*. International Journal of Inclusive Education, 10(4-5): 295-308.

Alasim, K.N. (2018). *'Participation and Interaction of Deaf and Hard-of-Hearing Students in Inclusion Classroom.'* International journal of special education 33, 2(2)

Anjali.(2016). *Academic Performance of the children with Mild and Moderate disabilities in Mainstream Classrooms*, International Education and Research Journal. Vol2. Issue11.

Balasundaram, P. (2005). *The Journey towards inclusive education in India*. Paper presented at Seisa University, Ashibetsu Shi, Hokkaido, Japan. Retrieved from: http://www.studymode.com/essays/Inclusive-Education-1278878.html

Berwal, S. (2012). *Barriers to inclusive education for the disabled learners*. Journal of Teacher Education and Research, 3(1), 98-108.

Bickenbach,J.(2013). *Reconciling the Capapbility approaqch and ICF*. Alter, Europeaqn Journal of Dsiablity Research,8,10-23

Biswas, P.C. and Panda, A., 2004. *A study on attitudinal barriers to inclusive education*. Journal of Educational Research and Extension, 41(1)

Brennan, Mary (2003). *Deafness, Disability and Inclusion: the gap between rhetoric and practice*, Policy Futures in Education, Vol.1.

Centre for Studies on Inclusive Education (CSIE), U.K. (2018). '*Index for Inclusion: developing learning and participation in schools.'* Available at: http://www.csie.org.uk/resources/inclusion-index-explained.shtml

Dailey, R.A. and Banerji, M., (1995). *A study of the effects of an inclusion model on students with specific learning disabilities,* Journal of Learning Disabilities, Oct. 1995 Julka, A., 2014. *Including Children with Special Needs: Primary Stage*, NCERT Publication

Devi, U. and P.A. Reddy (2016). *Problems of Children with Special Needs (CWSNs) in Accessing the Education: Role of Barrier free Environment.* Bulgarian Journal of Science and Education Policy (BJSEP), Volume 10, Number 1, 2016. Retrieved from: http://bjsep.org/getfile.php?id=209

Carson, K. (2001). *The Inclusive education of students with a a hearing impairment: A case study inquiry.* Thesis Submitted at the University of Western Sydney. Retrieved from:
https://researchdirect.westernsydney.edu.au/islandora/object/uws:50

Cawthon, S. (2001). *Teaching Strategies in Inclusive Classrooms with Deaf Students.* Journal of Deaf Studies and Deaf Education Volume 6, Issue 3, July 2001, Pages 212–225. Retrieved from:
https://academic.oup.com/jdsde/article/6/3/212/454615

Chadha, A. (2018). '*Concept note for the 2020 Global education monitoring report on inclusion'* UNESCO Programme and Meeting Document. Retrieved from:
https://unesdoc.unesco.org/ark:/48223/pf0000265329

Govinda, R. (2009). *Towards inclusive schools and enhanced learning: a synthesis of case study findings from different countries,* UNESCO

Gupta, V. (2019). '*A Study ON Policy and Practices for Inclusion of Children with Specific Learning Disability in Selected Schools'*, NIEPA, New Delhi.

Hay, F. J, Smit, J. and Paulsen, M. (2001). *Teacher preparedness for Inclusive Education*, South African Journal of Education. 21(4).

Hodkinson, A. and Devarakonda, C. (2009). *Conceptions of inclusion and inclusive education: A critical examination of the perspectives and practices of teachers in India* Research in Education 82(1):85-99 · November 2009

J. Saikind, Neil. (2010). *Primary data sources, Encyclopedia of Research Design,* Sage Publication.

Kaur, Saukhwinder. (2013). *Fostering barrier free education for children with special needs in India*, Issues and Ideas in Education (Vol.1,No.2)

Khalid N. Alasim, (2018). *Participation and Interaction of Deaf and Hard-of-Hearing Students in Inclusion Classroom.* International Journal of Special Education, Vol33, No.2.

Kuhumba, Shija. (2018). *Amartya Sen's Capability Approach as theoretical foundation of human development*, Journal of Sociology, University of Tanzania.

Kumar, Sanjeev and Khagendra Kumar. (2007). *Inclusive Education in India.* Electronic Journal for Inclusive Education Article 7.

La Rosa, O.M.A and Angulo, L.M.V. (2019). *Attitudes of Children with Hearing loss towards Public Inclusive Education*, Education Science, MDPI.

Lawrence, E. (2014). '*Educating Teachers of the Deaf: Experiences and perspectives from teachers on facilitating academic and social participation in Uganda.*' Doctoral thesis submitted at the Department of Special Needs Education, Faculty of Educational Science, University of Oslo. Retrieved from: https://docplayer.net/57462152-Educating-teachers-of-the-deaf.html

Limaye, S. (2016). *Factors Influencing the Accessibility of Education for Children with Disabilities in India, Accessibility of Education for Children with Disabilities in India*. Tata Institute of Social Sciences, India. Retrieved from: https://files.eric.ed.gov/fulltext/EJ1115090.pdf

Lindsay, G. K. (2007). *Inclusive education in India:Interpretation, implementation and issues Disability and inclusive education in India*, Consortium for Research on Educational Access, Transitions and Equity. Retrieved from: http://www.create-rpc.org/pdf_documents/PTA15.pdf

Madan, J.M., 2007. *Barriers to access and success: Is inclusive education an answer?* http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.431.6785&rep=rep1&type=pdf

Madan, Ankur&Neeraj Sharma. (2013). *Inclusive Education for children with Disabilities: Preparing schools to meet the challenge*, Electronic Journal for Inclusive Education. Article-4.

Mapolisa, Tichano and Thembinkosi, Tshabala.(2013). *The Impact of Inclusion of Children with Hearing Impairment into Regular Schools: A Case Study of Dakamela Primary School in Zimbabwe*, International Journal of Asian Social Sciences.

Mathew, S. and A. Aggarwal (2012).*Barrier free environment for inclusive education of children with hearing impairment at secondary level.* Golden Research Thoughts

Meijer, C.J.W. (2001). *Inclusive Education and Effective Classroom Practices* ed. European Agency for Development in Special Needs Education. Retrieved from: https://www.european-agency.org/sites/default/files/inclusive-education-and-effective-classroom-practice_IECP-Literature-Review.pdf

Miles,Susie & Nidhi Singhal. (2010). *The education for all and Inclusive education debate: conflict, contradiction or opportunity?*. International Journal of Inclusive Education.

Mpofu,John and Sylod, Chimhenga. (2013). *Challenges faced by Hearing Impaired Pupils in learning: A Case Study of King George VI Memorial School*, International Journal of Research and Method in Education, Volume2, Issue 1.

Pandey Yogendra, (2009). *A study of barriers in the implementation of inclusive education at the elementary level*

Pandey, S. & Y. Pandey, (2017). Barrier Free Inclusion of Learners with Special Educational Needs in Regular Classroom: Issues and Challenge. International Journal of Education and Psychological Research (IJEPR) Volume 6, Issue 2, June 2017

Parhoon, K. H., Hassanzadeh, S. & Mohavallai, P.H. (2014). *Educational needs assessment of students with hearing impairment in Inclusive School*, International Journal of Academic Research in Progressive Education and Development,Vol.3, No.2.

Peel, E. L. (2004). '*Inclusive Perspective in South Africa. University of Witwatersrand*.' Inclusive and Supportive Education Congress International Special Education Conference Inclusion: Celebrating Diversity? Retrieved from:
http://www.isec2005.org/isec/abstracts/papers_p/peel_e.shtml

Prakash, S. S. (2012). *Inclusion of Children with Hearing Impairment in Schools: A Survey on Teachers 'Attitudes,* Disability, CBR and Inclusive Development, Vol. 23, No. 3. Retrieved from:
http://dcidj.org/article/view/117

Ramanathan, K. A. , Zollers, J. N. and Yu, M., (1999). *The relationship between school culture and inclusion: How an inclusive culture supports inclusive education.* International Journal of Qualitative studies in Education, 12(2):157-174 · November 2010

Singhal, N. and M. Rouse, (2003). *A study on practitioner's perspective in some inclusive schools in India*. Perspectives on Education, Vol. 23 (3)

Singhal, N., (2006). *Inclusive education in India: International concept, national interpretation.* International Journal of Disability Development and Education 53(3),

Rouse, M. (2008). *'Developing Inclusive Practice: A Role of Teachers and Teacher Education' Education in the North, 16(1), 6-13.* Retrieved from:
https://www.abdn.ac.uk/education/documents/journals_documents/issue16/EITN-1-Rouse.pdf

Rouse, M. (2012). *Developing Inclusive Practice: A Role for teachers and teacher education?* University of Aberdeen.

Sharma, D. (2012). *Attitude of regular elementary school teachers towards inclusive education*. Indian Streams Research Journal, 1, 1-4.

Singal, N. (2011). *The Enabling role of education in the lives of young people with disabilities in India: Achieved and Desired outcomes*, International Journal of Inclusive Education.

Singhal, N., Jeffery, R., Jain, A. and Sood, N. (2011). *The enabling role of education in the lives of young people with disabilities in India: achieved and desired outcomes* International Journal of Inclusive Education , Volume 15, 2011 - Issue 10, Retrieved from:
https://www.tandfonline.com/doi/abs/10.1080/13603116.2011.555076

Singhal, N.(2015). *Disability-Education-Povery: Critique of existing research on Southern contexts*. University of Cambridge. (available at Research gate).

Singhal, N.(2016). *Education of Children with Disabilities in India and Pakistan: Critical Analysis of Developments in the last 15 years*, Prospectus, August. (available at Research gate).

Signhal, Nidhi.(2017). *Inclusive Quality Education for Children with Disablities.* University of Cambridge (available at Research gate).

Singh, D. (2009). '*Challenges in Inclusive Education and Service Provisions: Policies and Practices in Indian Context'*. Inclusive Education, Volume 2. Retrieved from:

http://schoolofeducators.com/2009/05/volume-2-month-5-day-19-challenges-in-inclusive-education-and-service-provisions/

Stanford Encyclopedia of Philosophy. (2016) *The Capability Approach.*

Suresh,K.(2011). *Astudy of integrated education for the disabled children (IED/IEDSS) scheme in Haryana: Assessment of the impact*. Xxxi DEPA dissertation, NIEPA, New Delhi. UDISE.(2016). Raw Data

Tennant, Lilly.(2018). *Invlusion and special education teacher preparation: Cross Roads between Traditional and New Approaches in the Classroom*, Conference Paper, Research gate.

Tichaona M. & Thembinkosi T. (2013).*'The Impact of Inclusion of Children with Hearing Impairment into Regular Schools: A case Study of Dakamela Primary School in Zimbabwe,* International Journal of Asian Social Science, 2013, 3(7)

Topping, Keith and Maloney, S. (2005) *The Routledge Falmer Reader in Inclusive Education*, Routledge Falmer (Available at: Taylor and Francis Group).

W. Best, John. (2005). *Research in Education*, 10th Edition, Pearson, ISBN: 0205458408.

*UNESCO (2004). '*Guidelines for inclusion: ensuring access to education for all. UNESCO Programme and Meeting Document. Retrieved from:
https://unesdoc.unesco.org/ark:/48223/pf0000140224

UNESCO.(2005). *Ensuring Access to Education for All.*

UNICEF (2014a), *Access to School and the Learning Environment.* I-Physical, Information and Communication. Retrieved from:
http://uis.unesco.org/sites/default/files/documents/out-of-school-children-south-asia-country-study-education-2014-en.pdf

UNICEF (2014). *'Global Initiative on Out-of-School Children, South Asia Regional Study.'* Retrieved from:

WHO (2011). *'World Report on Disability.'* Retrieved from:
https://www.who.int/disabilities/world_report/2011/report.pdf

Government Documents

Govt, of India, (2008). *Rehabilitation Council of India*, D.Ed. Special Education (CP) Norms, Regulations & Course Content.

Govt. of India, (2009). *Right of Children to Free and Compulsory Education Act, 2009*

Govt. of India, (2016). *Rights of Persons with Disabilities Act, 2016*

Govt. of India (2018-19). *Samagrah Shikha Abiyaan: An Integrated Scheme for Inclusive Education.*

NCTE.(2009). *National Curriculum Framework for Teacher Education*.

N.S.S.O.(2018). *76th Round. Ministry of Statistics & Programme Implementation*, Government of India.

RCI.(2015).*Curriculum Framework for Bachelor of Education in Special Education*.

UNCRPD, (2006). *United Nations Convention on the Rights for the Persons with Disabilities* .

UNICEF, (2018). *Inclusive Education Strategies: A Textbook.*

UNESCO.(2019). *State of the Education Report for Report Children with Disabilities*

UNO (2018). *United Nation Flagship Report on Disability and Development Report.*

World federation of the Deaf. (2018). *Position Paper on Inclusive Education*.

Thesis

A.N.D, Shakuntala (2017). *Academic achievement of students in relation to teachers' awareness of assistive technology, its availability and usage in schools for hearing impaired*.

Barman, S.(2015). *A comparative study between Hearing and Visually impaired boys in relation to their health related physical fitness and selected psycho-socail parameters*. Jadavpur University. Retrieved from:
https://shodhganga.inflibnet.ac.in/handle/10603/199149

Banue, B., Schauwer & G.V. Hove. (2016). *Inclusive Education for Students with Hearing Impairment in the Regular Secondary Schools in North-West Region of*

Disability of Cameroon: Initiatives & challenges, International Journal of Disability Development and Education.

Bell, D. (2013). 'Investigating Teaching and Learning Support fro Students with Hearing Impairment at a University in Western Cape.' Doctoral Thesis Submitted at the Faculty of Education, Stellenbosch University. Retrieved from: https://www.researchgate.net/publication/275212359_Investigating_Teaching_and_Learning_Support_for_Students_with_Hearing_Impairment_at_a_University_in_the_Western_Cape

Carson, Karie.(2001). *The inclusive education of students with a hearing impairment: A Case study Inquiry.* University of Western Sydney.

Devi, J. (2014). *Functioning of special schools for children with Visual Impairment in Himachal Pradesh: An Evaluative study*. Department of Education, Himachal Pradesh University, Shimla.

Erbas, E. (2017). *Strategies that teacher use to support the inclusion of students who are deaf and hard of hearing.* Faculty of the School of Education, Department of Curriculum and instruction- Special Education, Indiana University. Retrieved from https://scholarworks.iu.edu/dspace/bitstream/handle/2022/21831/Esra%20Erbas-%20Masters%20Thesis-%20December%202017.pdf?sequence=1

Fahad, A. A. (2016). *Teachers' attitudes toward the inclusion of Deaf and Hard of Hearing students in Regular Educatio.* Doctoral Thesis submitted at the Ball State University, Munice, Indiana. Retrieved from https://pdfs.semanticscholar.org/3877/1357a263d79e4315817826b3094fa0c46d0d.pdf

Revathi, D.(2015). *Effect of Collaborative learning on learning outcomes of students with special needs in Inclusive School*, Avinashilingam Deemed University for Women.

Roppolo, R.L. (2016). *The perceptions of General Education Teachers on the Inclusion of students who are Deaf or Hard of Hearing in the General Education Classroom,* Thesis Submitted at The University of Southern Mississippi. Retrieved from: https://aquila.usm.edu/honors_theses/375/

Pandey Yogendra (2009). *A study of barriers in the implementation of inclusive education at the elementary level. Soctoral* Thesis Submitted at The Jamia Millia Islamia, New Delhi.

S, Sreeja. (2010). *The psychological adjustments and vocational aspirations of hearing impaired students at higher secondary level*. Mahatma Gandhi Unversity, Kottayam.

S.Prakash, Santhi(2012). *Inclusion of children with hearing impairment in schools: A survey on Teachers'* Attitudes. Ali Yavar Jung National Institure of Hard of Hearing.

Links of Web Sources

- https://www.ferris.edu/RSS/disability/faculty-staff/classroom-issues/hearing/hearing-strategy.htm
- https://www.un.org/development/desa/disabilities/about-us/sustainable-development-goals-sdgs-and-disability.html
- http://www.schooleducationharyana.gov.in/Projects-Schemes/CWSN-IED
- https://gsdrc.org/topic-guides/disability-inclusion/background/definition-of-disability/
- https://www.un.org/development/desa/disabilities/publication-disability-sdgs.html
- https://www.ohchr.org/en/hrbodies/crpd/pages/crpdindex.aspx
- https://www.youtube.com/watch?v=6nAdWqby-uA
- https://www.adcet.edu.au/inclusive-teaching/specific-disabilities/deaf-hearing-impaired/
- http://www.mospi.gov.in/
- https://ncbegin.org/assistive-listening-devices-alds/
- https://journals.openedition.org/lisa/8913
- https://hearnet.org.au/hearing-loss/types-of-hearing-loss
- https://mangaloreuniversity.ac.in/sites/default/files/2019/Course%20-2011%20%20Inclusive%20Education%20%20(English%20Version)...pdf
- http://www.ncert.nic.in/gpPDF/pdf/tiicsnups101.pdf
- https://sustainabledevelopment.un.org/sdg4

Annexure-I
QUESTIONNAIRE

Note:

The present endeavour is a research study and its success will depend upon your honest responses. Therefore, it is hoped that you will extend your cooperation wholeheartedly in achieving the objective of the study. You are being assured that your responses will be kept strictly confidential and will be used solely for the research purpose. Please read the questions carefully and respond accordingly.

Thanking You.

NAME: ………………………………

CLASS: ………………………………

Questionnaire For Teacher:
- What is your qualification?
    1. Graduation+B.ED (Special Education)
    2. Graducation+B.Ed
    3. Post Graduation+B.Ed
    4. Post Graduation+B.Ed (Special Education)
    5. 12th + JBT

- How much experience you have in the teaching field?
    1. 0 -5 years
    2. 5 -10 years
    3. 10 -15 years
    4. More than 15 years.

- Is your training sufficient to deal with children with hearing impairment in the classroom?
  Yes ……. No…………

- Are you facing challenges in the classroom due to hearing impaired students? If yes, please mention.

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

- Do you prepare IEP for Hearing impaired students? If yes, What measures you consider during preparation?
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  ….

- Do you have any knowledge about the degree of Hearing Loss and Hearing Impairment?
  Yes……….   No……….

- Do you know how hearing aid operates?
  Yes……….   No……….

- Do other students of the class accept the hearing impaired students? If no, how do you make them understand to work in a group? Please specify.
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …

- Do you have any knowledge of sign language and gestures?   Yes / No

- Do you have knowledge of ICT for classroom teaching specifically for hearing impaired students? If yes. Please specify.
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………
  …………………………………………………………………………………………

- Is there any difference in teaching in the General classroom and Classroom with hearing- impaired students? If yes, please specify.

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

- Do you ensure that the student with hearing impairment understands the concept while learning?

  Yes……….   No………...

- Is there any specific provision of examination for hearing impaired students? If yes, please specify.

  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  ….

- Do you have any knowledge regarding the policy of hearing-impaired students? If yes, please specify.

  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- Are you providing a handout to hearing-impaired students? If yes, which things remain in your mind? Please Specify.

  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- Do you have a facility in the classroom for teaching through PowerPoint? Yes/No

- Do you get the facility in Teacher-learning equipment for hearing impaired students by the administration of the school? Yes/No

- What facilities you are getting from Block Resouce Centres specifically for hearing impaired students?

  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- What kind of facilities for hearing impaired students did you expect from the administration of the school?
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …

- How much funding you are getting for hearing impaired students?
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- What proportion of the school budget you have to restore for the Education of hearing-impaired students?
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- What kind of facilities do you have for children with hearing impairment and Deaf?
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- Do you provide the extra classes to hearing-impaired students to make them understand the concept? Yes/No.

- Do you provide the facility of the itinerant teacher to the students with hearing impairment? Yes/No.

- Do you have any knowledge regarding the amplifying devices for hearing-impaired students? If yes, please specify.
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………
  …………………………………………………………………………………

- What strategies you are using to make classroom activities inclusive for hearing-impaired students?

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………