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Educational Services for Deaf and Mute Children: A Case Study of the Government School in Manipur

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Abstract

The Deaf and Mute Government School of Manipur serves as an educational institution providing essential training and education for children with hearing and speech impairments in Imphal, Manipur. This case study investigates various aspects of the school, including its curriculum, facilities, student enrollment, retention, dropout rates, and teacher qualifications. The research aims to evaluate the current state of education offered to deaf and mute children, identifying gaps in infrastructure, teacher training, and overall educational provisions. The study uses qualitative and quantitative methods, collecting data through interviews with teachers and the Headmistress, observation schedules, and school records. Findings suggest the school follows a state board syllabus and employs various teaching methods, although it lacks adequate facilities such as vocational training resources and a comprehensive counseling section. Additionally, the study highlights teacher training challenges and the institution's absence of external financial support. The findings provide valuable insights for policy-makers, educators, and administrators to improve the quality of education for children with special needs in the region.

Keywords: *Special Education, Deaf and Mute Students, Assistive Technology, Teacher Training, Inclusive Education*

Education plays a vital role in transforming societies, especially in ensuring equal opportunities for children with special needs (Farswan, 2023). Children with hearing and speech impairments are often marginalized within conventional education systems, making specialized institutions essential (Hayes & Bulat, 2017). The Government Deaf and Mute School of Manipur exemplifies such an institution, focusing on providing tailored education and support for children with these disabilities. Recent studies indicate that specialized schools significantly contribute to reducing educational disparities for children with disabilities (Merrigan & Senior, 2023).

In Manipur, the school follows the state board syllabus and integrates pre-vocational training and co-curricular activities, fostering the holistic development of its students. This reflects global trends in inclusive education systems, which provide essential resources to ensure that children with disabilities are not left behind in terms of academic and social growth (Hayes & Bulat, 2017). Moreover, the school's ability to enroll, retain, and support students with disabilities aligns with similar efforts in other developing regions, where inclusive education is increasingly recognized as a key to overcoming educational inequalities (Freeman-Green et al., 2023).

The challenges in training and retaining qualified teachers also remain significant, and these challenges are common across institutions that provide education to children with special needs. (Gale et al., 2022). The study aims to analyze these aspects, providing valuable insights that can inform educational policy-makers and administrators in enhancing inclusive education frameworks.

Literature Review

The provision of education for children with disabilities, particularly those with hearing and speech impairments, has been extensively researched in various contexts. A global study by Ilkım et al. (2018) found that physical activity plays a significant role in the socialization of students with special needs, aligning with specialized schools' objectives in promoting academic and social development.

Similarly, Erdem (2017) explored the role of assistive technologies in special education and emphasized that integration of these tools significantly enhances learning outcomes for students with disabilities. This finding is particularly relevant in the context of Manipur, where the Government Deaf and Mute School has been incorporating various assistive technologies to help students overcome communication barriers.

Hornby & Kauffman (2021) conducted an important study focusing on the challenges faced by teachers in special education, specifically those working with children with hearing and speech impairments. His research revealed that more than 70% of these teachers struggled with their organizational roles and that teacher performance was highly influenced by salary and training levels.

Taneja-Johansson et al. (2023) explore the challenges faced by teachers in rural Indian government schools in educating children with disabilities. Despite recognizing the importance of inclusive education, teachers struggle with deficit-oriented views and lack support structures. The findings highlight the need for effective professional development and support networks to improve inclusive practices.

Despite these studies, there is a notable gap in research specific to the northeastern regions of India, particularly in the state of Manipur. Research suggests that regions with less developed educational infrastructure face additional challenges in providing quality special education services. This literature review thus emphasizes the need for further research on how local cultural, economic, and infrastructural conditions influence the quality of education provided to children with disabilities in Manipur.

Methodology

This study uses a case study design to explore the educational curriculum, facilities, and management at the Government Deaf and Mute School in Imphal. The population comprises the Headmistress and 14 teachers, who form the sample for data collection through interviews, questionnaires, and observations.

Results

Analysis of Opinions

The data collected through questionnaires, interviews, and observation were analyzed qualitatively and quantitatively by using descriptive statistics in an objective wise.

Objective I: To study the curriculum of Imphal Govt. School for Deaf and Mute.

This has been divided into Part A and Part B, depending on the data source.

PART A

The analysis and interpretation for this section have been taken from the Headmistress and the school records.

Syllabus:

Govt. Deaf and Mute school is under the state board, so they are following the state board syllabus, Board of Secondary Education Manipur (BOSEM). And the school offers an academic programme as well as pre-vocational training.

Medium of Instruction:

The medium of instruction used in the school is English. At the primary level, English and the mother tongue are also used whenever required.

School subjects:

The school uses both curricular and co-curricular activities, and the following school subjects are being offered to all the students-

Curricular:

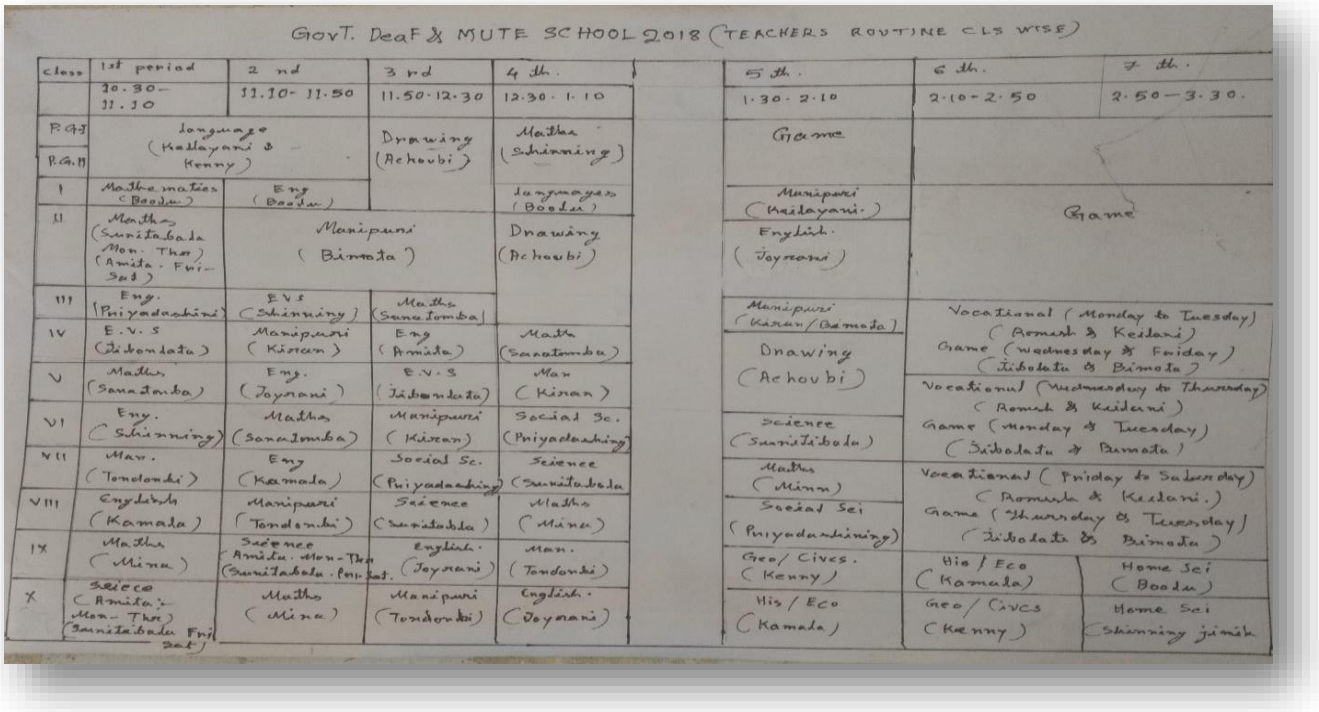
English I and II, Mathematics, Science I and II, Social Science I and II, Environmental Education, Drawing, Manipuri (Meetei Mayek), Physical and Health Education, Commerce (Optional), Home Science (Optional), Higher Mathematics (Optional), Computer Science (Optional), MIL (Modern Indian Languages).

Academic Year:

The academic session starts in February and continues till December. They are allotted one month of summer break from mid-June to mid-July. The school also gives winter vacation immediately after the final examinations get over in December, which continues till the end of

January. The school follows the state government calendar and gets the other holidays as per the state government.

School Timetable:


GOVT. DEAF & MUTE SCHOOL 2018 (TEACHERS ROUTINE CLS WISE)

class	1st period	2 nd	3 rd	4 th.	5 th.	6 th.	7 th.
	10.30– 11.10	11.10- 11.50	11.50-12.30	12.30- 1.10	1.30- 2.10	2.10- 2.50	2.50–3.30.
P.G.I P.G.II	language (Kallayani & Kenny)		Drawing (Achoubi)	Maths (Shimming)	Game		
I	Mathematics (Boodu)	Eng (Boodu)		Languages (Boodu)	Manipuri (Kallayani)	Game	
II	Maths (Sunitabala Mon. Thur) (Amita. Fri–Sat)	Manipuri (Bimota)		Drawing (Achoubi)	English. (Joynani)		
III	Eng. (Priyadashini)	EVS (Shimming)	Maths (Sanatomba)		Manipuri (Karun/Bamota)	Vocational (Monday to Tuesday) (Romesh & Keidani) Game (Wednesday & Friday) (Jibalata & Bimota)	
IV	E.V.S (Jibondata)	Manipuri (Kiran)	Eng (Amita)	Math (Sanatomba)	Drawing (Achoubi)		
V	Maths (Sanatomba)	Eng. (Joynani)	E.V.S (Jibondata)	Mar (Kiran)		Vocational (Wednesday to Thursday) (Romesh & Keidani) Game (Monday & Tuesday) (Jibalata & Bimota)	
VI	Eng. (Shimming)	Maths (Sanatomba)	Manipuri (Kiran)	Social Sc. (Priyadashing)	Science (Sunitabala)		
VII	Mar. (Tondonbi)	Eng (Kamala)	Social Sc. (Priyadashing)	Science (Sunitabala)	Maths (Mina)	Vocational (Friday to Saturday) (Romesh & Keidani.) Game (Thursday & Tuesday) (Jibalata & Bimota)	
VIII	Engdata (Kamala)	Manipuri (Tondonbi)	Science (Sunitabala)	Maths (Mina)	Social Sci (Priyadashing)		
IX	Maths (Mina)	Science (Amita. Mon-Thu (Sunitabala. Fri-Sat.	English. (Joynani)	Man. (Tondonbi)	Geo/ Civcs. (Kenny)	His / Eco (Kamala)	Home Sci (Boodu)
X	Scieco (Amita:- Mon- Thur) (Sunitabala Fri Sat)	Maths (Mina)	Manipuri (Tondonbi)	English. (Joynani)	His / Eco (Kamala)	Geo / Civcs (Kenny)	Home Sci (Shimming jimik

Figure 1. Daily School Timetable

Source: Computed from Primary Data

Evaluation Procedure:

The students are evaluated through the continuous and comprehensive evaluation (CCE) system. Some of the specific procedures that they follow to evaluate the students for the full academic year are as follows:

a. Monthly Test
b. First Mid-Term Exam
c. Half- Yearly Exam
d. Second Mid-Term Exam
e. Final Exam

Board of Examination:

The respondent said the school followed the State Board examination pattern, i.e., Board of Secondary Education Manipur (BOSEM).

PART B

The analysis and interpretation of this section have been taken from the responses of the teachers' questionnaire.

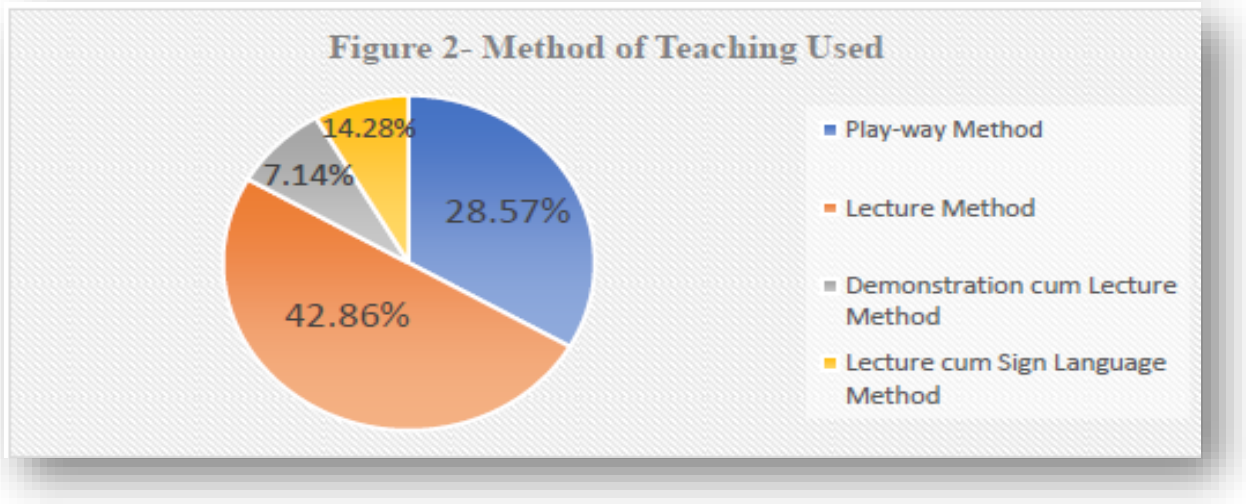
Method of Teaching:

The details of the teaching method used by the teachers are shown in Table 1.

Table 1 Percentage of the teaching methods being used

S. No.	Method of Teaching Used	Total No. of Respondents	No. of Respondents Using the Method	(%)
1	Play-way Method	14	4	28.57
2	Lecture Method	14	6	42.86
3	Demonstration cum Lecture Method	14	2	14.28
4	Lecture cum Sign Language Method	14	1	7.14

Source: Computed from the Primary Data



Source: Computed from Table 1

The percentage of positive responses to the different types of Teaching Methods used by the 12 respondents is shown in Table 1 and Figure 2. From the table and figure, it is understood that for the play-way method, the percentage of positive responses is 28.57%, for the lecture method is 42.86%, for demonstration cum lecture method is 7.14%, and for lecture cum sign language is 14.28%. The teachers also said they face different problems while teaching the students.

Co-Curricular Activities:

i. Games and Sports: Physical exercises, cricket, football, tug of war, etc.
ii. Socially Useful Productive Work (SUPW): Cleaning the campus, plantation, making models, etc.
iii. Competitions: recitation, extempore speech, quiz, story-writing, debate, dancing, etc.
iv. Recreational activities: Listening to music, watching television, yoga, and outings.

Objective II: To find out the facilities available for children with disability in the government school.

Facilities provided by the school in terms of:

a) Academic

b) Infrastructure

c) Training

d) Counselling

The second objective is to find the facilities available for children with disability in government schools. To fulfill the second objective, the researcher uses the interview, observation schedule, and questionnaire.

a) Academic:

Table 2. Academic facilities provided by the school

S. No.	Facilities	Availability No.	Adequate	Inadequate
1.	Classrooms	12	Yes	No
2.	Textbooks	As per the no. of students	Yes	No
3.	Blackboard	12	Yes	No
4.	Computer	5	No	Yes

Source: Computed from the Primary Data

Table 2. Indicates the following: -

1. The school has a proper and adequate classroom for every class for instructional purposes provided with long desks and benches, as per the information received from the interview held with the Headmistress and observation of the school. The investigator found out that all the classrooms were in good condition. There were teaching materials and charts relating to their learning materials on the walls.
2. Concerning the textbooks, the textbooks were given free to all the students by the school, which were adequate for all the students.
3. As for the provision of the blackboard facility, the blackboards were all in good condition; they were long and big enough and were easily visible to the students, as was what the teacher was writing on the blackboard.
4. It also shows that the school has 5 computers in total for teaching-learning purposes for students and teachers. The number of computers the school possesses is inadequate for the number of students, but the Headmistress says they are acquiring more computers as soon as possible.

b) Infrastructure:

Table 3. Infrastructure facilities provided to the school

S. No.	Facilities	Availability	Adequate	Inadequate
1	Library	Nil	No	Yes
2	Science Laboratory	1	Yes	No
3	Auditorium	1	Yes	No
4	Drinking water	2	Yes	No
5	Hostel	2	Yes	No
6	Washroom/Toilet	2	Yes	No
7	Electric facility	As per the requirement	Yes	No
8	School building	1	Yes	No
9	Playground	1	Yes	No
10	Garden	1	Yes	No

Source: Computed from the Primary Data

Table 3. Indicates the following: -

1. The investigator found out that the school has no library facility, which is very important for the students and the school. It is highly necessary for a school to possess and maintain a library.
2. The school has one science laboratory, which is adequate for the students and teachers in their teaching and learning process, as they have given separate allotments for the different classes.
3. The school has one auditorium where the school conducts different types of programs.
4. It also shows that the school has proper drinking water facilities and is located in both hostels, boys' and girls' hostels.
5. Regarding the hostel, as the school is a residential school, there are two hostels for both boys and girls separately. The warden monitors the hostels.
6. The school also has two separate washrooms/toilets for both boys and girls, which are properly maintained.
7. There is proper electricity and adequate power supply for the school.
8. The school building is a pucca building, which is adequate with the number of students.
9. There is one playground for the students to play and enjoy their recreational time.
10. The school also has one garden where they plant different types of flowers according to the season.

c) Training:

The students were given speech therapy and audiology to improve their speaking and listening, especially those in need.

d) Counselling:

The school also has a counseling facility for the students, though they don't have a proper counseling section or a specific counselor; instead, the faculty act as counselors through which they extend their help to the students.

Pre-vocational Training:

Various career-related courses are imparted for the pre-vocational training of the students in the school.

The deaf and mute students were given some of the pre-vocational training in the school, such as:

- Tailoring
- Knitting
- Fine arts
- Wall hangings

The above are some of the important or various career-related courses being imparted to the deaf and mute students of the school in order to develop to the maximum and become self-dependent in their later lives.

Other Services and Programs:

The analysis and interpretation of data for this section were based on the responses of the Headmistress during the interview.

The school carries out other services and programs for the deaf and mute students.

The respondent said the school had rendered some services and programs for deaf and mute students. They are as follows: -

a. Give free coaching to students in grades I to VI through the help of the Headmistress.
b. Awareness programs
c. Field trips
d. Outings

Agencies that finance these programs:

The respondent said most of the programs were financed by the Deaf Welfare Association, the school fund, and the school headmistress.

Name of the schools/centers/organizations in which the school is working together:

The Headmistress said there are no schools/centers/organizations where the school works together.

Aims/purpose of working together with the schools/centers/organizations:

The respondent says the school does not work together or collaborate with other schools/centers/organizations, so there is no question of fulfilling any purpose with such organizations.

Objective III: To find out the status of Enrollment, Retention, Dropout, and Achievement of the Children with Disability of the govt. school for the last three years.

The third objective was to determine the enrollment, retention, dropout, and achievement status of children with disability in government schools for the last three years. In order to fulfill the third objective, the researcher uses the interview, observation schedule, and school information.

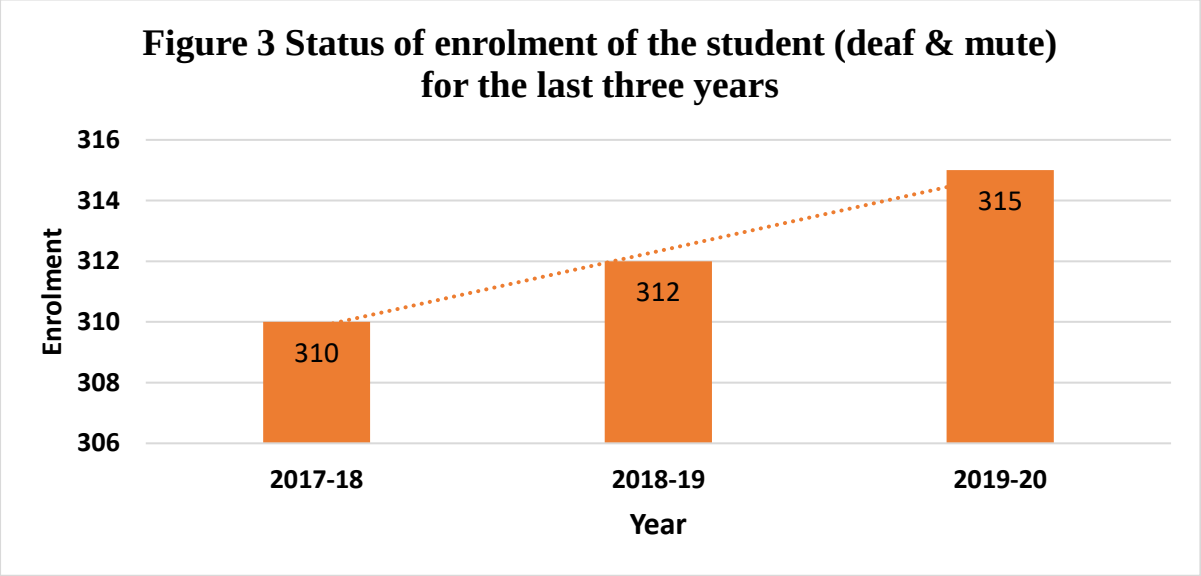
Details of enrolment, retention, dropout, and achievement are in the following tables.

Enrolment:

Table 4. Status of enrolment of the student for the last three years

Year	2017-18	2018-19	2019-20
Category of Student	Deaf & Mute	Deaf & Mute	Deaf & Mute
Enrolment	310	312	315

Source: Computed from the Primary Data



Source: Computed from Table 4

Table 4 and Figure 3 indicate the total number of students enrolled for the following years: 310 in 2017-18, 312 in 2018-19, and 315 in 2019-20.

Retention:

Table 5 Status of Retention of the student for the last three years

Year	2017-18	2018-19	2019-20
Category of Student	Deaf & Mute	Deaf & Mute	Deaf & Mute
Retention	Nil	Nil	Nil

Source: Computed from the Primary Data

Table 5. shows that because of the implementation of the no-retention policy, no student is retained till class VIII, but for the students of IX and X standards, no student is retained except those who fail the Board Exam.

Dropout:

Table 6 Status of Dropout of the student for the last three years

Year	**2017-18**	**2018-19**	**2019-20**
Category of Student	Deaf & Mute	Deaf & Mute	Deaf & Mute
Dropout	Nil	4	Nil

Source: computed from the Primary Data

Table 6 indicates that there were no dropout students in 2017-18, and in 2018-19, there were four total students: one student from class IV, two from class VI, and one from class VII.

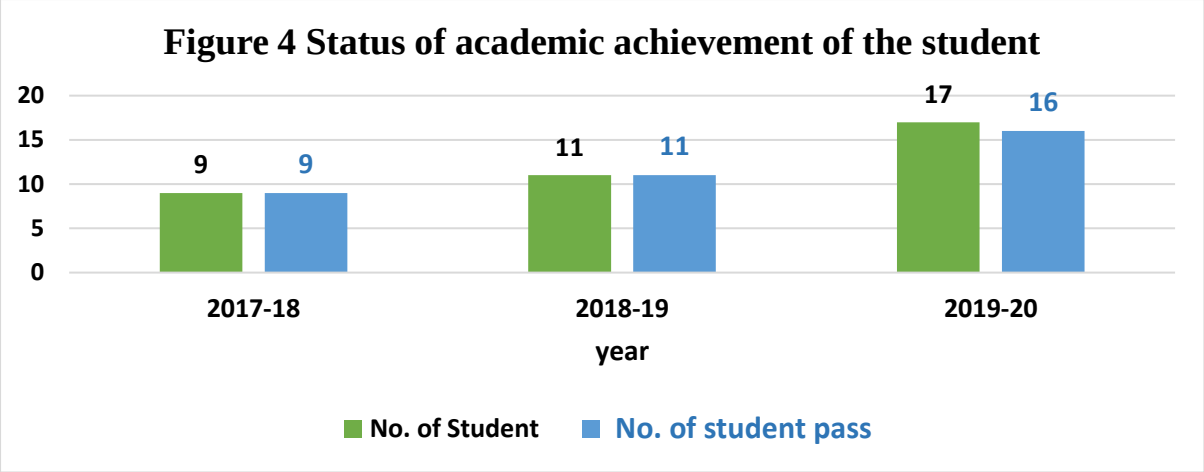
Achievement:

The investigator discovered that the school used different achievement tests, such as diagnostic, formative, and summative. The assessment is done through both curricular and co-curricular and is carried out weekly, quarterly, and yearly.

Table 7 shows the students' academic achievement status for the last three years.

Year	**Total No. of Students**	**No. of Student Pass**	**No. of Student Fail**	**%**
2017-18	9	9	Nil	100
2018-19	11	11	Nil	100
2019-20	17	16	1	94.12

Source: Computed from the Primary Data



Source: Computed from Table 7

Table 7 and Figure 4 indicate X standard students' total academic achievement. The investigator found out that 100% in the year 2017-18, 100% in 2018-19, and 94.12% in 2019-20.

Objective IV: To study the teachers' availability and the teachers' profile of the govt. school.

The fourth objective was to study the teachers' availability and the teachers' profile of the government. school. For this, the investigator collected the following information from the school teachers through the questionnaire:

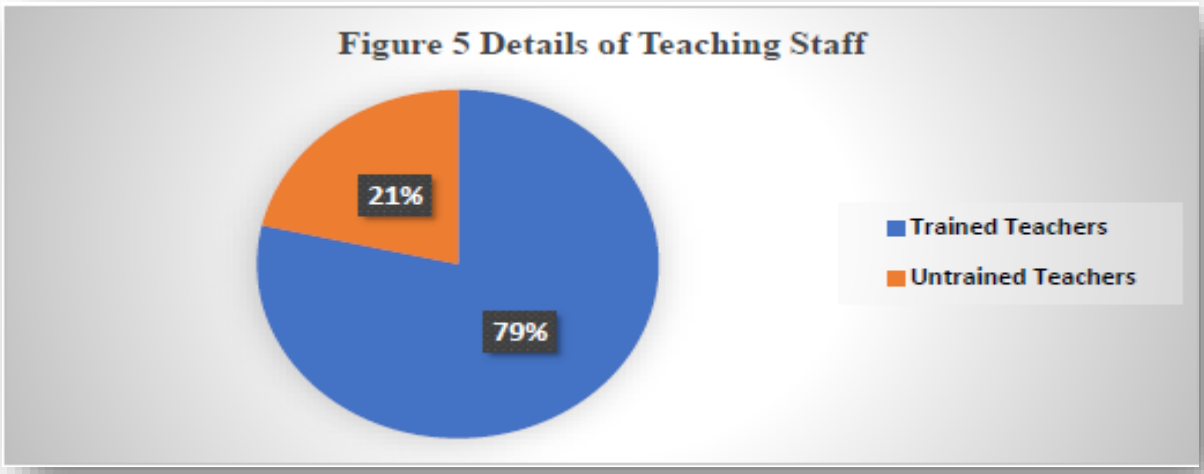
Details of Teaching Staff

The percentage of trained and untrained teaching staff is shown in Table 8.

Table 8 Percentage of trained and untrained teachers and instructors

Sl. No.	Teachers	N	%
1	Trained Teachers	11	78.57
2	Untrained Teachers	3	21.43
	Total	14	100

Source: Computed from the Primary Data



Source: Computed from Table 8

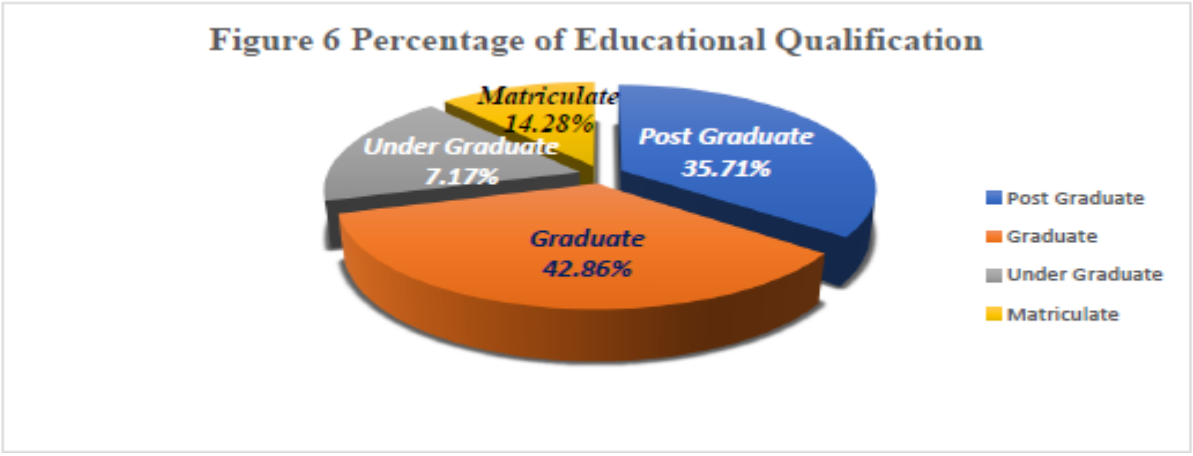
Table 8 Figure 5 indicates that 78.57% of the teachers, including the Headmistress, are trained, and 21.43% are untrained teachers.

Educational Qualification:

Table 9 Educational Qualification of the Teachers

Educational Level	Frequency	Percent
Post Graduate	5	35.710
Graduate	6	42.860
Under Graduate	1	7.142
Matriculate	2	14.285
Total	14	100

Source: Computed from Primary Data



Source: Computed from Table 9

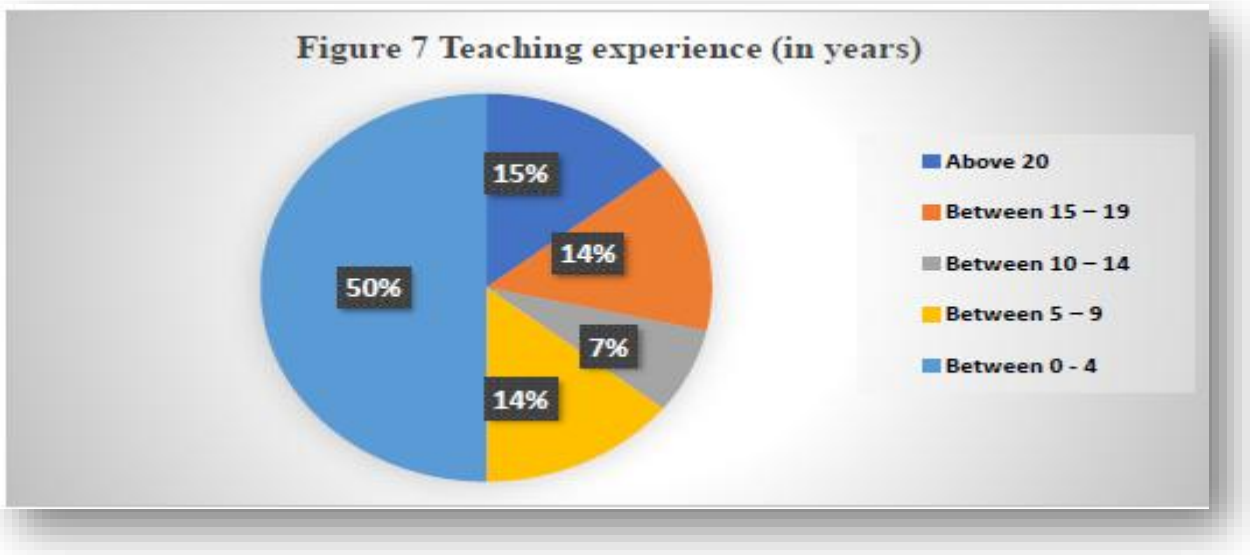
Table 9 and Figure 6 show the frequency and percentage of the educational qualifications of teachers of the Govt. Deaf and Mute School Imphal. The above table shows that out of 14 teachers, 5 are post-graduates, 6 are graduates, 1 is an undergraduate and 2 are matriculates. And from the figure shows that 35.71% of the teachers are post-graduates, 42.86% are graduates, 7.14% are undergraduates, and 14.28% are matriculates.

Teaching Experience:

Table 10 Percentage indicating the years of teaching experience

Sl. No.	Teaching experience in the school (in years)	N	%
1	Above 20	2	14.285
2	Between 15 – 19	2	14.285
3	Between 10 – 14	1	7.142
4	Between 5 – 9	2	14.285
5	Between 0 - 4	7	50
	Total	14	100

Source: Computed from the Primary Data



Source: Computed from Table 10

Table 10 and Figure 7 indicate that only 14.285% of the teachers have served the school for more than 20 years, 14.285% between 15 to 19 years, 7.142% between 10 to 14 years, 14.285%

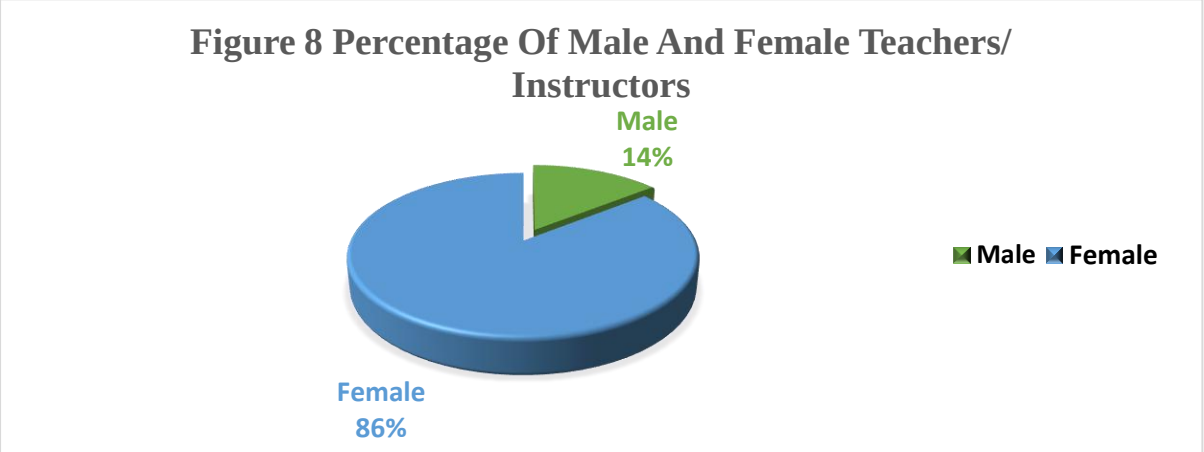
between 5 to 9 years, and majority of the teachers, that is, 50% have worked between 0 to 4 years.

Gender:

Table 11 Percentage of male and female teachers and instructors

Sl. No.	Gender	N	%
1	Male	2	14.28
2	Female	12	85.72
	Total	14	100

Source: Computed from the Primary Data



Source: Computed from Table 11

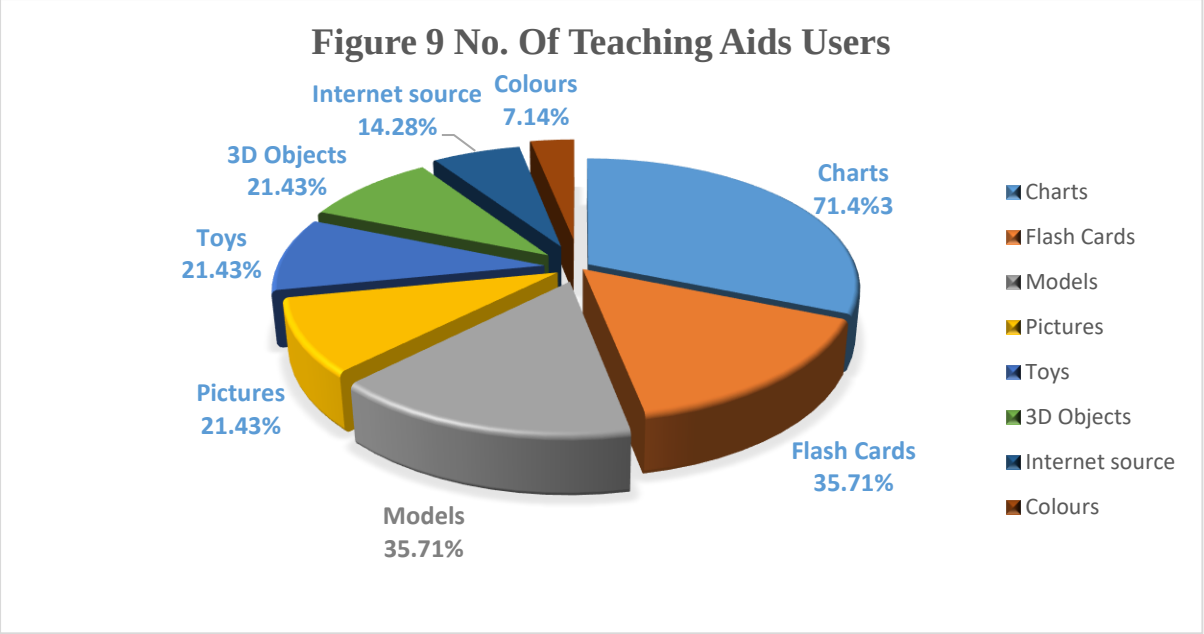
Table 11 and Figure 8 show that of the total number of teachers in the school, 85.72% are females, and only 14.28% are males.

Teaching Aids or Equipment:

Table 12 Teaching Aids or equipment teachers use in teaching and learning.

Teaching Aids	NA	No. of Users (%)	Total
Charts	4	10 (71.43)	14
Flash Cards	9	5 (35.71)	14
Models	9	5 (35.71)	14
Pictures	11	3 (21.43)	14
Toys	11	3 (21.43)	14
3D Objects	11	3 (21.43)	14
Internet Source	12	2 (14.48)	14
Colours	13	1 (7.14)	14

Source: Computed from Primary Data



Source: Computed from Table 12

The teaching aids used by the teachers for Deaf and Mute students are shown in Table 12 and Figure 9. From the given table, it is understood that 71.43% of the teachers' used charts, 35.71% used flashcards, 35.71% used models, 21.43% used pictures, 21.43% used toys, 21.43% used 3D objects, 14.28% used internet sources and 7.14% used colours.

Benefits derived by the students from the school:

The respondents have highlighted the following benefits of deaf and mute students from the school-

i. They will develop their personality as a whole and will be able to become an independent person socially, emotionally, and physically.
ii. They will develop academically as well as in the extra-curricular aspects.
iii. The students benefit from the opportunity for food and lodging.
iv. They will develop good behaviour and become friendly.
v. They will develop their intelligence, confidence, and smartness.

Apart from the above-given points, the students get benefits such as:

- Computer education
- Vocational training
- Laboratory
- Library
- Games and sports equipment
- Free textbook, exercise book, and other stationary items
- Free school uniforms

- Trained teachers
- Counselling services
- Mid-day meal, as part of the Sarva Shiksha Abhiyan (SSA) scheme.
- The students learn many things apart from textbooks. They learn daily living skills, orientation, and important values like discipline, respect for elders' honesty, etc.

Thus, deaf and mute students benefit from special education centers in many ways. On the other hand, special education exposes them to different fields and enables them to learn as much as possible.

Objective V: To study the system of management and financial provision for deaf and mute children of the government. school.

The fifth objective was to study management style and financial provision for deaf and mute children of the government. school. For this, the investigator collected the following information from the school's Headmistress through interviews.

Management and Financial Provision

Table 13 shows the management and financial provision for the students.

Sl. No.	Questions	Response of Principal
1	Who provided the land for the school?	State government
2	Was the school initially located elsewhere?	Yes, at Wahengbam Leikai Imphal Manipur
3	Is the school building owned/rented/governed? Building/Any other?	Government building
4	Whether the school is- Private/Govt-aided/Deficit/Any other?	Government aided
5	What are the school's sources of finance?	Social Welfare Department
6	Does the school receive any grant from the central or state government?	State government
7	Does the school get financial help from political parties, political leaders, NGOs, or other sources?	No
8	Is there any international source of help in matters of finances?	No
9	Who financed the construction of the school building? –Self-financed/Government/NGOs/Mission/Any other	State government

10	What is the total expenditure on the purchase of equipment?	15 Lakhs- 20 Lakhs in a year
11	What is the total amount of money spent on teachers' monthly salaries?	420,000 approximately

Source: Computed from both Primary and Secondary Data.

Table 13 shows the management and financial provision of the school for the students, and it can be summarized in the following way:

1. The investigator found out that the state government provided the land for the school.
2. The respondent said the school was initially located in Wahengbam Leikai, Imphal, Manipur.
3. The school building is a government building, not owned or rented.
4. The investigator discovered that the school is government-aided, not private, deficit, or any other.
5. The school's sources of finance are from the state's Social Welfare Department.
6. As per the information received from the respondent, the school received a grant only from the state government.
7. The school does not get financial help from political parties, political leaders, NGOs, or other sources.
8. There is no international source of help for the school regarding finances.
9. The investigator has found out that the state government financed the construction of the school building.
10. Regarding the total expenditure on equipment purchases, the respondents said 15-20 lakhs are spent annually.
11. The total amount spent on teachers' salaries has been observed from secondary sources. The monthly total amount spent on teachers' salaries is approximately Rs 4,20,000.

Discussion

The findings of this study on the Government Deaf and Mute School of Manipur demonstrate significant achievements and areas for improvement. The curriculum is well-rounded, offering academic and co-curricular activities such as sports and recreational programs. However, integrating more specialized resources tailored to the needs of students with hearing and speech impairments would further enhance its impact (Fernández-Batanero et al., 2022; Zdravkova et al., 2022). Studies have shown that using assistive technologies in special education contexts,

such as audiology and speech therapy, can dramatically improve learning outcomes (Erdem, 2017).

Teacher training is another key area of focus. While the majority of the teachers in the school are trained, only a few are specifically qualified to work with deaf and mute students. Prior research supports that specialized training for educators leads to better educational outcomes in special education settings (Gilson & Biggs, 2023).

Infrastructure is another major challenge. Although the school provides basic amenities like classrooms and textbooks, essential resources such as a well-equipped library and comprehensive counseling services are lacking. These deficiencies are likely to affect the holistic development of students, as found in research focusing on infrastructure in special education institutions (Barrett et al., 2019; Chan & Luk, 2022; Datnow et al., 2023).

Conclusion

In conclusion, the Government Deaf and Mute School of Manipur has made commendable progress by providing its students with a diverse curriculum and essential services. However, to unlock the full potential of its students, the institution must address gaps in several critical areas. Strengthening teacher training with specialized certifications, investing in assistive technologies, and improving infrastructure are pivotal steps toward ensuring inclusive and effective education.

Furthermore, collaboration with external partners—such as audiology clinics, speech therapists, and special education experts—could amplify the schools' impact. Research has shown that educational environments that integrate community partnerships and advanced learning tools foster better student outcomes. Similarly, creating a comprehensive support system, including counseling and vocational guidance, would facilitate smoother student transitions into higher education and employment pathways.

In summary, while the foundation laid by the school is intense, targeted enhancements will further promote its students' academic, emotional, and social development, paving the way for a more inclusive society. Continued monitoring and evaluation of these efforts will ensure sustainable growth and long-term success.

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