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Teaching Practices in Self-Contained Classrooms for Students with Hearing Impairment: A Qualitative Inquiry

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ABSTRACT

Teachers of students with hearing impairment perform their key responsibilities of teaching students in special education classrooms. This research explores the current instructional practices employed in self-contained classrooms for students with hearing impairment by their teachers. This study was qualitative, followed by an exploratory type. A sample of 21 participants was selected using a purposive sampling technique until the data reached saturation. A semi-structured interview was used for data collection. The validity of instruments was confirmed through the experts (N=2). An extensive literature review helped the researchers to examine instrument's reliability. The data was analysed through qualitative data analysis software NIVO 15 by applying the open coding technique to generate codes, categories, sub-themes, and then major themes. Data analysis revealed Five (05) major themes that are existing teaching practices, problems faced by students with hearing impairment, challenges for teachers, efforts of the teachers, and teaching approaches. The findings from this study revealed that teachers teach their students according to their special educational needs, but teachers require professional training to acquire competency in the teaching & learning process. This study recommends that adequate educational resources should be provided in the classes of hearing-impaired students for quality education.

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1. Introduction

Special education helps students who need extra support because of a disability or challenge. It gives them a personalized learning plan and extra resources to succeed. Students who suffer from physical or mental problems, such as blindness or deafness, are eligible for this kind of education (Wang, 2024). For children, it's when their hearing problems make it hard for them to understand language and words, even if they wear hearing aids or other devices to help them hear (Ndoh & Umbugadu, 2024). Teachers use the ways to communicate and teach effectively, using tools and methods to help all students learn. Teachers encourage students to express themselves through their preferred methods, either verbal communication, sign language, or a mix of both. By addressing communication barriers, teachers can foster academic success and social inclusion for hearing-impaired students, who often face challenges in these areas (Mursita et al., 2024). Hearing-impaired students can benefit from specialized support through special education services, tailored to meet their unique academic and social needs. Moreover, teachers can influence digital tools, for example, laptops, smartphones and computers to design dynamic and comparative learning spaces that accommodate the development stage of every student or many individual requirements, promoting effective learning (Handayani et al., 2024). Various innovative technologies cater to students with

special needs, providing invaluable support and supporting equitable educational access (Ramadani & Mustafa, 2024).

A self-contained classroom means that a single instructor gives instruction to the same group of students in various subjects throughout the day, a common arrangement typically found in elementary education. Additionally, specialized learning environments and resources can be made available as needed to support students with specific requirements (Naeemy, 2024). By integrating students with special needs into natural classroom settings, self-contained classrooms effectively address unique learning requirements and encourage a helpful learning environment (Coleman et al., 2023). Teachers hold a vital responsibility to develop the best learning environment, ensuring equal access to the curriculum and promoting active participation among all students(Dhivya et al., 2023). This study examines how self-contained classrooms support students with hearing impairment, exploring factors like teaching methods, technology, and classroom culture. This study investigates successful teaching strategies for students with hearing impairments in self-contained classrooms, filling a large research gap.

1.1. Statement of the Problem

The education of hearing-impaired students in self-contained classrooms presents distinct challenges. However, there is a lack of understanding regarding teachers' perceptions of their instructional practices, as well as the resources and support deemed most effective in this specific educational context. Students may face unaddressed issues that hinder their learning, while teachers struggle with communication barriers and the need for specialized strategies. This study aims to explore these perceptions, identify student challenges, examine teacher difficulties, and determine the most effective teaching approaches to increase education outcomes in self-contained classrooms for learners with hearing impairment.

1.2. Objectives of the Study

The objectives of the study were to:

1. Find out the teachers' perception of their existing teaching practices in self-contained classrooms for students with hearing impairments.
2. Identify the problems faced by students with hearing impairments in self-contained classrooms.
3. Explore the challenges faced by teachers of students with hearing impairments in self-contained classrooms AT special education schools.
4. Inquire about the efforts delineated by teachers to improve the students' learning in self-contained classrooms.
5. Determine the suitable teaching approaches for students with impairments at the school level.

1.3. Questions of the Research

The following are the questions of the research:

1. What is the teachers' perception of their existing teaching practices in self-contained classrooms for students with hearing impairment?
2. What are the problems faced by students with hearing impairments in self-contained classrooms?
3. What are the challenges faced by teachers in self-contained classrooms?
4. What are the efforts delineated by teachers to improve the students' learning in self-contained classrooms?
5. What are the suitable teaching approaches for hearing impaired students?

1.4. Study's Significance

The proposed research study on teaching practices in self-contained classrooms for students with hearing impairments has far-reaching implications for various stakeholders in the special education community. Teachers working in these classrooms will greatly benefit from the identification of effective teaching practices and strategies, which will not only improve their confidence and competence in adapting instruction to meet the diverse needs of their learners but also improve their ability to create inclusive and supportive learning environments. Learners with hearing impairments, the ultimate beneficiaries of this research, will reap the

benefits of improved teacher practices, leading to better outcomes in language development, academic achievement, and social-emotional well-being. Moreover, school administrators and policymakers will benefit from the study's findings on teacher training and support needs, enabling them to make data-driven decisions about program development, resource allocation, and policy initiatives.

1.5. Limitations of the Study

1. This research was limited to the province of Punjab only. Other provinces were not included.
2. The sample of the study was limited to the teachers serving in special education Department in Punjab.

1.6. Delimitations of the study

1. A self-developed semi-structured interview protocol was administered as an instrument of the study due to the unavailability of a standardized instrument.
2. The study was limited only to the teachers of hearing impairments.

2. Literature Review

Hearing impairment is a common problem that affects both adults and children. Any malfunction in the auditory (hearing) system or any part of the ear can result in hearing impairment (Alqudah, Zuriekat, & Shatarah, 2024; Ndoh & Umbugadu, 2024). A major problem affecting the quality of life in retirement or home is adequate audiological support (Govender & De Jongh, 2021). Individuals who have difficulty hearing constitute a disadvantaged and frequently neglected population in the education system (Kanwal, Bashir, & Shahzadi, 2023). The challenges and benefits experienced by these students in various learning environments provide important advice for educators and legislators looking to improve educational outcomes (Mealings et al., 2023). Students with hearing impairment, who find social interactions and communication difficult and feel socially isolated (Shukla et al., 2020). The fundamentals of special education, issues encountered, and improved teaching strategies for students with special needs (Wang, 2024). By attending to specific emotional, social, and learning demands, effective learning settings about students with hearing impairments are promoted by special education (Neale, 2023).

A special education teacher teaches every topic in a self-contained classroom. Students in self-contained classes frequently need a lot of help and need a thorough, highly regulated education (Garwood, Brunsting, & McKenna, 2024; Spencer, 2021). Teachers have a big impact on raising the standard of education and students' overall development (Jadhav et al., 2024). Teachers use various teaching techniques, instructional material or sign language and various adaptation to help these students (Ragmoun & Alfalih, 2024). The academic obstacles faced by hearing-impaired students in academic performance, curriculum, socialization and communication (Amjad, Shoaib, & Qudoos, 2024). In addition to academic challenges, social connections and extracurricular activities may provide additional obstacles that impact an individual's learning (Palma & Villafuerte-Holguín, 2023). Establish practical learning guidelines and address the most pertinent educational needs among learners (Sriwisathiyakun, 2024). Active engagement in the learning process is the first step in reforming teacher preparation programs (Tuimebayeva et al., 2024). In this case, studying poor academic performance and the literacy level of deaf learners is a major concern, and it is necessary to understand the core of the situation (Bruwer, Van Staden, & Du Plessis, 2024). Technology can significantly increase engagement by providing support and increased access to instructional materials and learning processes (Rizk & Hillier, 2022). A need for tailored strategies and additional resources to foster the success of education and enhance educational policy (Salas García & Rentería, 2024).

3. Methodology of the Research

3.1. Research design

An exploratory type of research with qualitative approach was the design of the research.

3.2. Study’s Population

From the special education schools of Punjab, teachers from hearing-impairment field were taken as the population of the study.

3.3. Sample of Research

The sample of the study was 21 participants who were teaching hearing-impaired students at a special education school in Punjab. Both male (N=11) and female (N=10) participants were included in the sample that was gathered from various cities of Punjab. The sample was taken from primary and secondary levels. The age range of the sample was between 30 to 40 years. The qualifications of the sample were Master's degree holders (N=13) and M.Phil (N=8). The experience of the sample was under 4 to 8 years. Cities of the sample were Lahore (07), Faisalabad (01), Multan (02), Gujranwala (01), Sargodha (02), Tandliawala (01), Khanewal (01), Okara (01), Hafizabad (01), Renalakhurd (01), Saahiwal (02), and Khaariyan (01).

3.4. Instruments for Data Collection

A semi-structured interview protocol was administered to collect data. This was a self-developed semi-structured interview. It was constructed based on different classroom practices and adaptation techniques by keeping in mind the existing literature review, research objectives and the question of the study. There were a few probing questions and mostly open-ended queries in the semi-structured interview. In the first section of the questionnaire, each responder was required to supply basic information about themselves, including their age, gender, and qualifications. After that total of 10 items and many probing questions were arranged in the final form of an interview to generate maximum information regarding the research topic.

3.5. Validity and Reliability of Instruments

The validity of instruments was assured by expert opinion (N=2). These two (02) expert belong to the field and were associated with the field of teaching students with hearing impairment. However, the reliability of the instruments was assured through the extensive literature review related to the research problem.

3.6. Sampling Technique

The purposive sampling technique was used for data collection.

3.7. Data Collection Procedure

After the completion of the instrument, data collection procedure was commenced. Participants of the study were approached physically or through personal contacts. Before commencing the data collection procedure, the participant's consent to be interviewed was acquired. The researchers had to read and interpret the questionnaires in a language familiar to the respondents and conduct interviews. Different probing questions were also asked according to the need. The time of every interview was 42 to 50 minutes. Responses of the participants were recorded and written then they were transcribed and written by researchers for qualitative data analysis.

3.8. Data Analysis

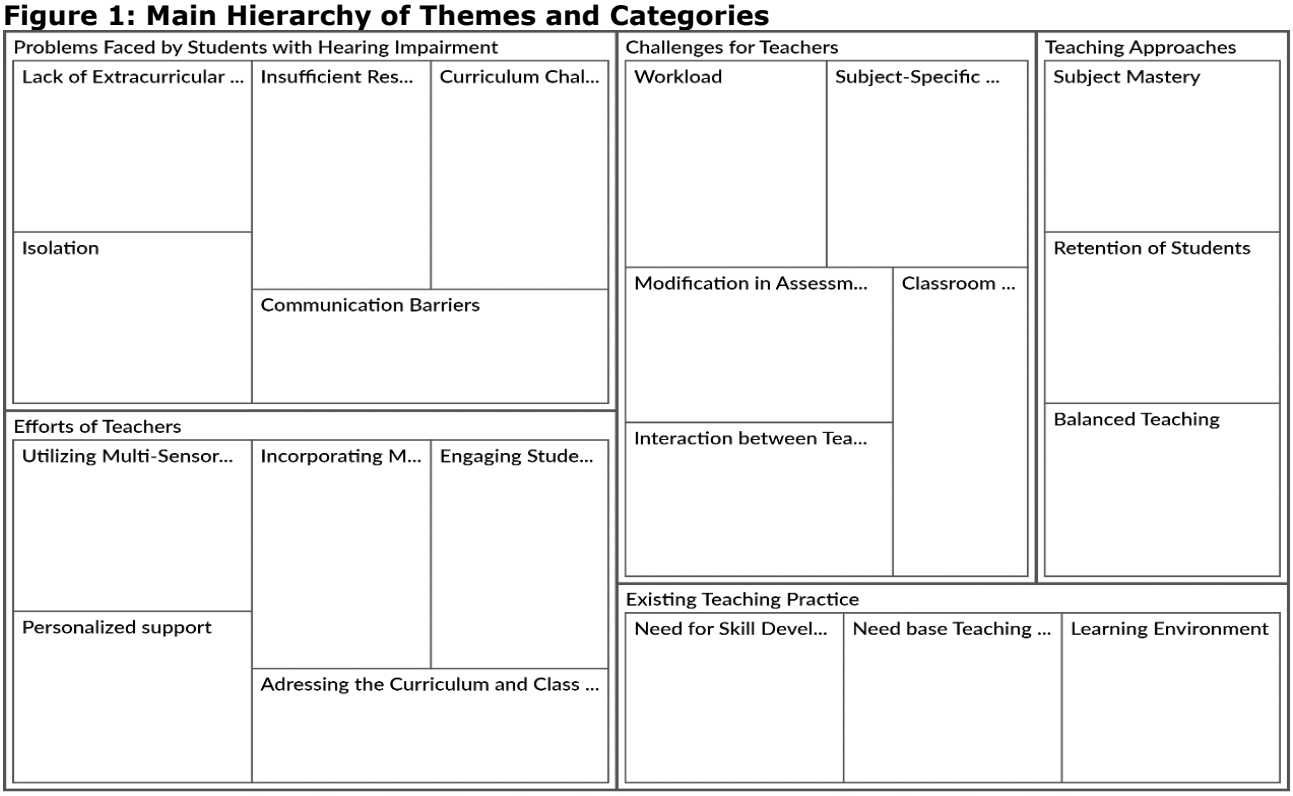
Data was analyzed through the software for qualitative data analysis, NVIVO version 15. The researchers applied an open coding technique to generate codes, categories and then sub themes. The technique is called coding & thematic analysis, which was used by the researchers to analyze the data. After generating categories, sub-themes and major themes emerged from the categories.

3.9. Ethical Considerations for the Study

The researchers followed all the ethical considerations during this research strictly. Before commencing the study, it was decided by the researchers to comply with the research ethics properly. It included the avoidance of plagiarism and the collection and interpretation of data. Additionally, the participants were notified before data collection and interviewing. They became assured that the information they provided would not be revealed in the future by their names. The participants of the study were also told by the researchers that all the information obtained from them would only be used for research purposes.

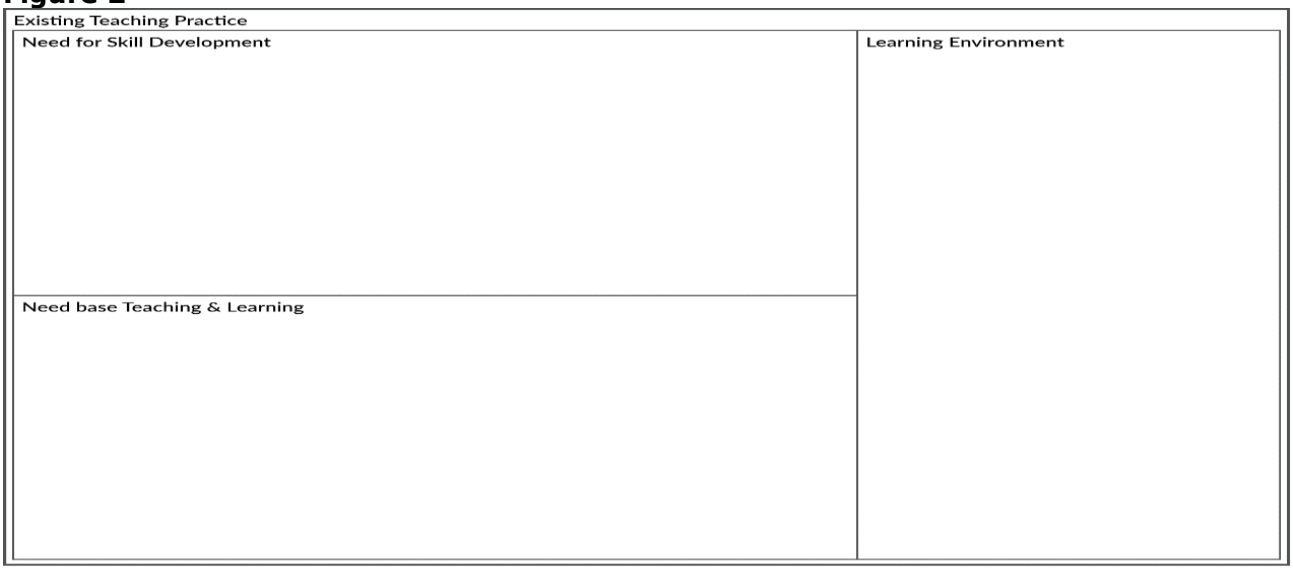
3.10. Qualitative Data Analysis

Figure 1: Main Hierarchy of Themes and Categories



R.Q 1: What is the teachers' perception of their existing teaching practices in self-contained classrooms for students with hearing impairment?

Figure 2



Theme 1: Existing Teaching Practice

This theme reflects the opinion of the educators about self-contained classrooms on the response of the participants about the existing teaching practices in self-contained classrooms. The theme emerged from the categories, i.e., learning environment, need-based teaching & learning, and need for skills development. They only add sophistication and offer no pedagogical advantages if technology-enhanced learning environments are not transformed into SLE, which results in unnecessary educational expenditure (Maulidiya et al., 2024).

Category 1: Learning Environment

The participants' responses are reflected in this category about the existing teaching practices for hearing-impaired students in self-contained classrooms. The category is based on the responses of the participants about supporting and accessible learning environments. The

participants of the study narrated that instructors often employ strategies such as using visual aids, sign language interpreters and technology like hearing aids and captioned videos. One of the participants explained that,

"*Existing teaching practices in self-contained classrooms for hearing-impaired students focus on creating inclusive and supportive learning environments. A positive classroom atmosphere is a key component of effective teaching practices in self-contained classrooms for students with hearing impairment."*

Category 2: Needs-Based Teaching & Learning

This category highlights the responses of participants about need-based teaching & learning processes in the school for students with hearing-impairment. It was stated by the study's participants that teachers use all ways of teaching according to students' needs such as One-to-one teaching, peer tutoring, demonstration method, and total communication method. One of the participants narrated that,

"I mostly focus on the needs of my students. I know very well that they have different educational needs as compared to the normal children."

Category 3: Need for Skill Development

The participants' responses are shown in this category that there is the need of skill development programme in the teachers especially in using assistive technologies and understanding specialized communication strategies for students with hearing impairment. It was described by the participants about training that can have a direct impact on teaching effectiveness. However, one of the participants said,

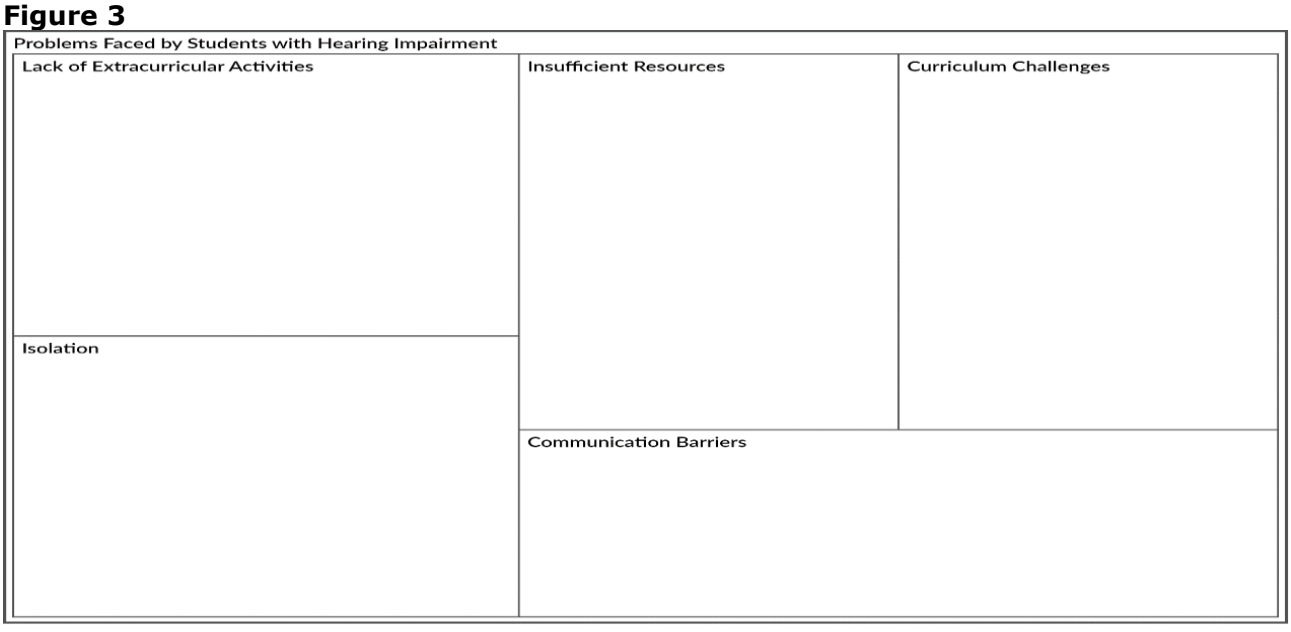
"It is significant for the teachers to develop their professional skills for teaching students with hearing impairment."

Another participant stated that

"Yes, I believe that self-contained classrooms are where instructors perform best, but they also take on other school-related responsibilities."

R.Q 2: What are the problems experienced by hearing impaired students in self-contained classroom?

Figure 3



Theme 2: Problems Faced by Students with Hearing Impairment

This theme reflects the opinion of the teachers about self-contained classrooms on the responses of the participants about the existing teaching practices in self-contained classrooms. The themes have emerged from the categories, i.e., communication barriers, isolation, insufficient resources, curriculum challenges, and lack of extracurricular activities. An educated

generation is essential, but SWHI faces unique challenges in obtaining higher education. The following are analyzed as important components of academic performance: learning, socialization, curriculum, instruction, communication and support services (Amjad, 2024).

Category 1: Barriers of Communication

This category highlights participants' responses for the barriers in communication faced by students with hearing impairment in self-contained classrooms. The participants of this study described difficulty in understanding from teachers and classmates, especially if sign language proficiency varies, leading to frustration and gaps in learning. One of the participants explained that,

"The main barrier between teachers and students is communication barriers that persist despite the use of sign language and visual aids, especially if there is a discrepancy in proficiency levels between teachers and students."

Category 2: Isolation

The category mentioned above the participants' responses about the lack in social interaction with peers, both within the self-contained classroom and with students from mainstream settings. The participants of this study narrated that isolation can affect students' social and emotional development, leading to stigmatization and limited opportunities for building social skills. One participant commented that,

"Hearing-impaired students experience the problem of isolation in their lives. They face this at home and sometimes in an inclusive set-up as well."

Category 3: Insufficient Resources

The participants' responses are reflected in this category for the lack in modern or adequate resources, including assistive technologies, specialized materials, and visual aids. The participants of this research expressed that the lack of effectiveness of teaching and students' learning experiences contributed to frustration and disengagement. One of the participants described that,

"We are very behind in quality education for students with hearing impairment due to insufficient resources."

Category 4: Curriculum Challenges

The participants' responses contains that the curriculum in self-contained classrooms is often not adequately adapted to meet the needs of hearing impaired students. It was stated by study's participants that the lack of diverse teaching methods, an unmodified curriculum, and teachers' struggle to cover all subjects effectively led to academic gaps and disengagement. One of the participants explained that,

"I tried to work as per the provided curriculum, but I think the curriculum is not upgraded and modified as per the students' needs. I have even seen teachers reduce the curriculum or the activities of the schools by not following the modified curriculum properly throughout the year."

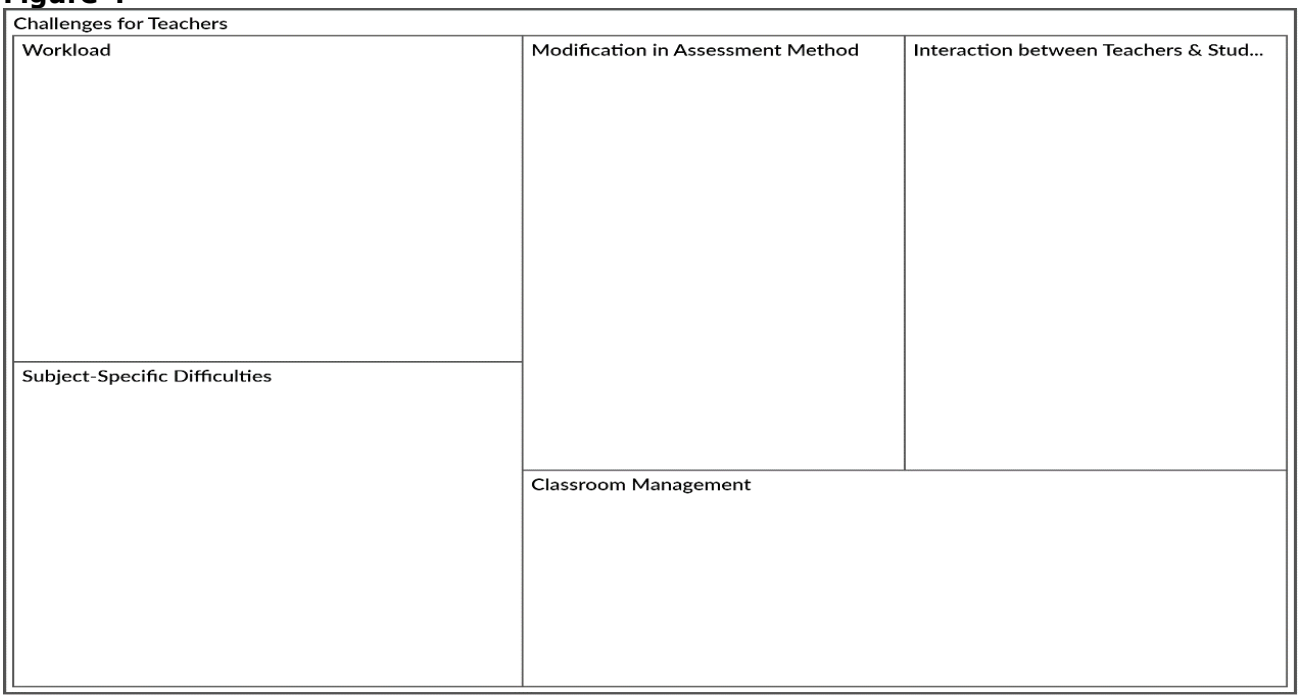
Category 5: Lack of Extracurricular Activities

The participants' responses are shown in this category tha that hearing-impaired students in self-contained classrooms who may face boredom due to repetitive teaching methods and a lack of variety in activities. The participants of this research expressed that limited opportunities for extracurricular activities, such as sports, affect their overall engagement and development. One of the participants narrated that,

"Students don't find opportunities to learn from other teachers, they feel bored, and students don't not time for recreation activities (sports activities)."

R.Q 3: What are the challenges faced by teachers in self-contained classrooms?

Figure 4



Theme 3: Challenges for Teachers

This theme is concerned with the teachers about self-contained classrooms on the responses of participants about the existing teaching practices in self-contained classrooms. Categories in this theme are interaction between teachers & students, modification in assessment method, workload, classroom management, and subject-specific difficulties. According to findings, teachers' problems included a lack of teaching resources, strained professional ties between them and their students and inadequate classroom management techniques (Yonas, Rupia, & Onyango, 2023).

Category 1: Interaction between Teachers & Students

The participants' responses are shown in this category that are the common challenges while assessing students' academic progress as communication barriers between students and teachers. The participants of this research described that these barriers can lead to difficulties in understanding students' responses and assessing their true knowledge, as well as students struggling to understand instructions. One participant narrated that

"Communication barriers can make it difficult to accurately gauge students' understanding and performance."

Another participant commented that

"Communication barriers create difficulty in understanding students' responses or expressing expectations."

Category 2: Modification in the assessment method

The participants of the study about the standardized tests and traditional assessment methods that are often not well-suited for hearing impaired students. The participants further explained there is a need for modified, specialized assessment tools that accommodate the unique learning styles and needs of these students. One participant narrated that

"The need for specialized testing materials and ensuring assessments accurately reflect students' understanding."

One more participant further added that

"Modification in the testing method and criteria is often necessary for hearing-impaired students."

Category 3: Workload

The above mentioned category highlights participants' response who face challenges in managing heavy workloads, with many teaching all subjects and performing multiple roles in self-contained classrooms. The participants of this study described that it is very difficult to devote adequate time and attention to each student's assessment. One participant added,

"many challenges, such as I am teaching a higher class and their syllabus too lengthy there are total number of subjects is eight can you imagine special students and special students subjects are eight so it is very difficult for me to manage these subjects daily to manage their work, to check their subject vice copies and in this situation is very difficult for me to manage the time and to manage the focus on the unique need of the students."

Category 4: Classroom Management

The participants' responses are shown in this category for managing student behaviour and maintaining a conducive learning environment in a self-contained classroom. The participants of this study stated that disruptive behaviours and a lack of focus in the classroom can make accurate assessment difficult. One of the participants explained that,

"The teacher was irritated due to the student's behaviour"

Another participant further stated that

"Special students have severe tantrums, so it depends on the strength of the students."

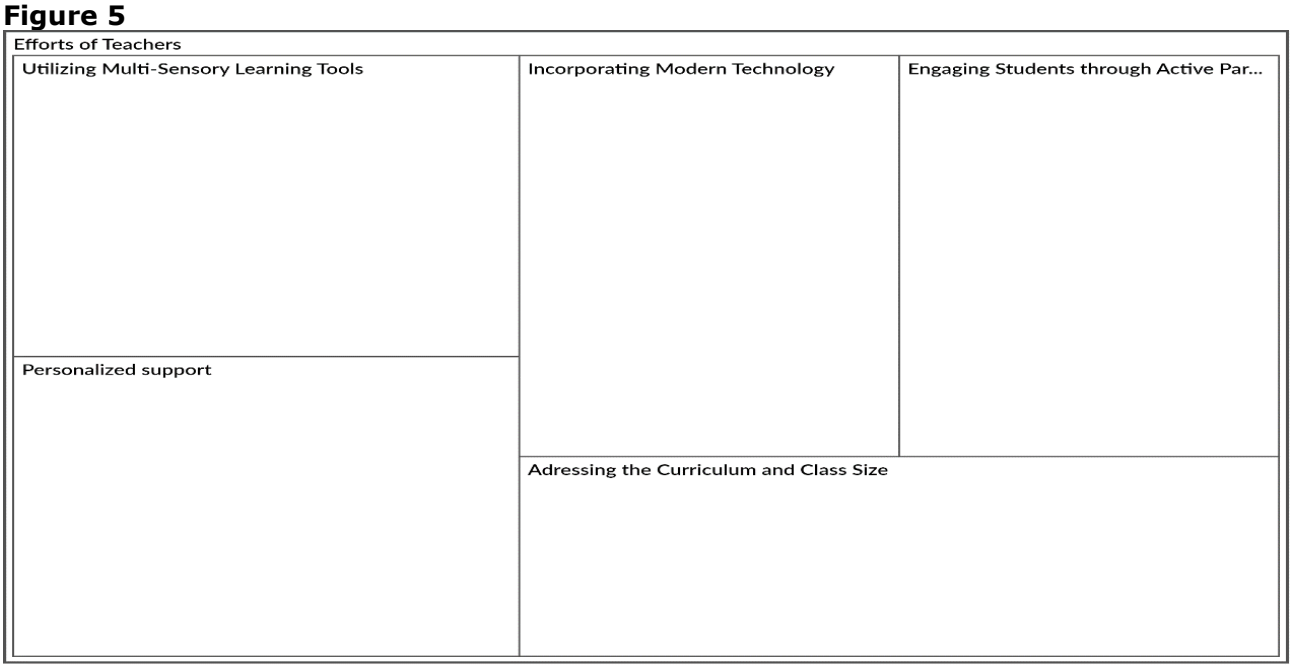
Category 5: Subject-Specific Difficulties

The participants of the study depicted in their responses regarding assessing progress in certain subjects, such as math and science, which pose a unique challenge for both students and teachers. The participants of this study narrated that the complexity of these subjects and the lengthy syllabus can make assessment more difficult, particularly in self-contained classrooms with diverse academic needs. One of the participants explained that,

"Math and science are problematic for the academic progress of hearing-impaired students."

Research Question 4: What are the efforts delineated by teachers to improve the students' learning in self-contained classrooms?

Figure 5



Theme 4: Efforts of Teachers

This theme is associated with the teacher's self-contained classrooms in the responses of participants about the existing teaching practices in self-contained classrooms. The themes have emerged from categories i.e., utilizing multi-sensory learning tools, personalized support, incorporating modern technology, engaging students through active participation, and addressing the curriculum and class size. Reducing social and educational marginalization and facilitating access to education for students with disabilities are two important benefits of educational technology or EdTech (Lynch, Singal, & Francis, 2024).

Category 1: Utilizing Multi-sensory Learning Tools

The participants' responses are highlighted in this category that are incorporating visual aids, flashcards, real objects, and interactive technologies like LCDs and LEDs as a popular strategy to enhance student understanding. The participants of this research said that these tools help make abstract concepts more concrete and accessible for students with hearing impairments. One participant explained that,

"Incorporating visual aids, tactile materials, and interactive technology to enhance comprehension."

One more participant further added that

"I use real objects for addition questions in mathematics."

Category 2: Personalized Support

This category points out that the responses of participants about tailoring guidelines for meeting the special needs on individual grounds. The participants of this study stated that teachers provide personalized support through adaptive curriculum, individualized assessments, and small group activities to cater to different learning styles. However, one of the participants explained that,

"Individual support is very important because regular assessment and adaptation of teaching methods are key."

Another participant added that

"Tailoring instruction and assessments to meet each student's specific learning needs and preferences."

Category 3: Incorporating Modern Technology

This category highlights participants' responses regarding importance of incorporating modern technology, such as laptops, projectors, and speech-to-text software, to increase the value of education. The participants of this study stated that these tools help to engage students, make lessons more interactive, and provide alternate means of communication. However, one participant explained that

"The latest version of modern technology may improve the quality of learning."

Another participant endorsed that

"Projectors, multimedia and LCDs or LEDs should be used to capture students' attention."

Category 4: Engaging Students through Active Participation

The participants' responses are reflected in this category that are how teachers use interactive learning strategies such as group work, role modelling, and project-based learning to actively engage students. The participants of this study narrated that encouraging participation not only keeps students motivated but also helps them absorb knowledge more effectively. However, one participant explained that,

"By engaging them in classroom participation, the question involves them in the teaching-learning process."

Another participant added that

"Encourage them to participate actively in learning and engage them by giving reinforcement."

Category 5: Addressing the Curriculum and Class Size

This category highlights that adjusting the curriculum to suit the capacity of students with hearing impairments and maintaining an appropriate student-teacher ratio is another crucial strategy. The participants of this study described that reducing class size helps provide more focused attention, and a modified curriculum reduces the burden on both students and teachers. However, one participant explained that,

"Self-contained classrooms improve students' education by adapting and modifying the curriculum."

Another participant expressed that

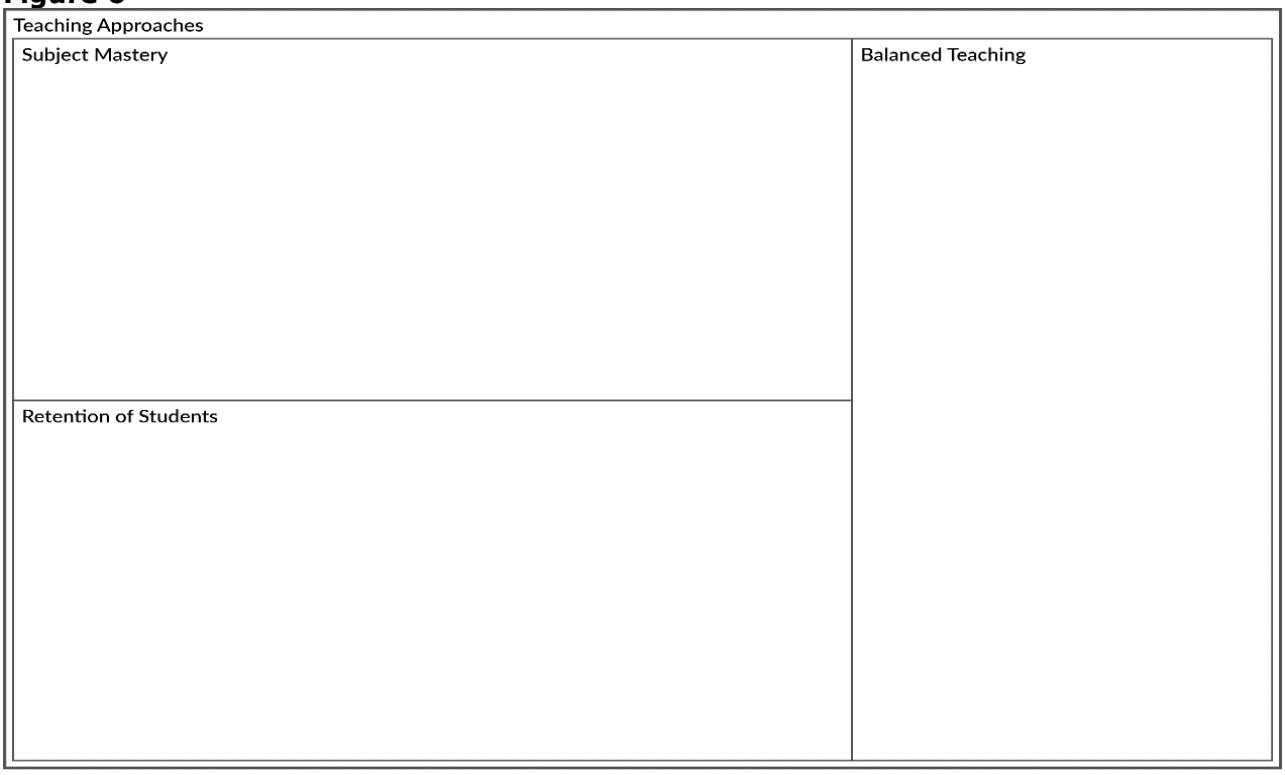
"Class size should be less than 10-12 students per teacher."

One more participant further said that

"The syllabus is too lengthy, and students are burdened, so there's a need for AV aids to improve their learning."

R.Q 4: What are the suitable teaching approaches for students with hearing impairments?

Figure 6



Theme 5: Teaching Approaches

This theme is related to the suitable teaching for hearing-impaired students on the responses of participants about the existing teaching practices in self-contained classrooms. The categories included in this theme are retention of students, subject mastery and balanced teaching. Three categories of students' retention, subject mastery and balanced instruction have been used to analyze the themes (Kanwal, Bashir, & Shahzadi, 2023).

Category 1: Retention of Students

This category shows the responses of participants about the several teachers who emphasized the advantage of self-contained classrooms through the retention of students. The participants of this study believe that this approach allows educators to better understand and address the individual needs of the students with hearing impairment. Additionally, one of the study's participants described that

"Teaching hearing-impaired learners in self-contained classrooms offers advantages such as specialized instruction and tailored learning environments."

One more participant narrated that

"Self-contained classrooms provide individualized attention to students with hearing impairment."

Category 2: Subject Mastery

In above mentioned category, the participants' responded about the subject specialist provision for classrooms of hearing-impaired students by the special education department would be a better approach to produce subject mastery among students with hearing impairment. It was narrated by the participants of the study that subject-specific mastery of the teachers would bring more expertise to their students with hearing impairment, which could lead to better academic outcomes for students. One of the participants stated that,

"Subject teachers can input more constructively regarding the subject. In self-contained classrooms, the teacher may not have a good command of each subject."

Another participant described that

"Various subjects taught by specialized teachers are best because not every teacher is perfect in all subjects."

Category 3: Balanced Teaching

The participants of the study responded in this category about the value for both approaches and observed balanced support. The participants of the study stated that self-contained classrooms offer consistency and individualized support, and specialized subject teachers bring depth of knowledge. The ideal solution may involve blending both systems for maximum benefit. One of the participants explained that,

"Self-contained classrooms offer more personalized and focused support compared to teaching with multiple subject teachers."

Another participant said that

"Collaboration with specialists and access to resources are crucial for ensuring a well-rounded education in both settings."

One more participant further described that

"In a self-contained classroom, the teacher can provide more individualized attention, but subject teachers have their specific teaching styles that can benefit students".

4. Findings

The findings of the study are mentioned below:

4.1. Existing Teaching Practices

This study found that existing teaching practices of the teachers for their hearing-impaired students include the provision of a learning environment and teaching as per the learning needs of students. However, teachers perceive the importance of the need for skills development among teachers of hearing-impaired students.

4.2. Problems Faced by Students with Hearing Impairment

This study found that problems faced by learners with hearing impairment are communication barriers, students feeling isolated and inadequate resources. However, students need modern resources for curriculum challenges and extracurricular activities for hearing-impaired students.

4.3. Challenges for Teachers

The study found that challenges for instructors are the interaction between teachers & students with hearing impairment, teachers faced problems with modification in assessment methods and felt the workload. However, teachers observe the importance of classroom management for subject-specific assessment of hearing-impaired students.

4.4. Efforts of Teachers

This study found that efforts of the teachers to utilize multi-sensory learning tools and incorporate modern technology to improve the understanding of the hearing impaired students, teachers provide personalised support as per the individual needs of the students. However, teachers perceive the importance of addressing the curriculum and class size to reduce the burden on both students and teachers.

4.5. Teaching Approaches

This study found that the teaching approach of the teachers is to retain students for better understanding and to address the individual needs of students with hearing impairment. However, teachers perceive the importance of subject mastery and impairment-balanced teaching in self-contained classrooms for their hearing-impaired learners.

5. Discussion

Teaching in a self-contained classroom is a real opportunity for teachers in special education. Teachers perceive differently from each other about existing teaching practices in special education. Few teachers elaborate that they adapt the strategies and provide a learning setting to the hearing-impaired students according to their needs in self-contained classrooms through the use of assistive aids, and appropriate teaching strategies. In this way, this finding of the study influences the existing curriculum design in special education schools. According to the findings, teachers can enhance the educational experiences and academic performance of students with hearing impairment by implementing appropriate tactics leveraging technology and updating the curriculum as needed (Winarsih & Mursita, 2024). In addition, for the teaching and learning process to be effective, teachers must use different teaching tactics (Bajenioa et al., 2020). They also aim to improve the understanding of students with hearing impairment by using multi-sensory learning tools and modern technology. The review conclusions highlight the values of multisensory techniques hands-on and context-based teaching in meeting the various learning requirements of deaf students (Yasin & Mohamad, 2024). Moreover, the important point is that teachers believe that they need skill development and modern techniques for teaching learners with hearing impairment. This finding of the study highlights the need for teachers to their regular teacher training so that they can better serve the hearing-impaired students.

It was found in this study that hearing-impaired students in self-contained classrooms face problems caused by the lack of modern resources for extracurricular activities and also feel isolated as a result of communication barriers. Hearing-impaired students also need special learning strategies. The ability to use cutting-edge technology to design a more personalized and efficient learning environment gives teachers a new tool to aid in each student's education journey (Song, Shin, & Shin, 2024). During the discussion, teachers encounter challenges in managing the classroom with specific subjects and without modifying the curriculum. In self-contained classroom classes, teachers said that they have few resources to instruct students with hearing impairment. To adequately educate deaf students in school, educators must overcome several obstacles, including scarce resources overburdened support system, a lack of experience and a lack of time (Moustache & Makhoba, 2024). The workload on teachers is high due to a huge number of students in the class, which makes it problematic for instructors to assess the students academically. In light of the initiative to reduce workload, we noted that regulations like the quality time program demonstrated how the teacher’s job is becoming a site of contestation that necessitates constant observation and examination (Stacey et al., 2024). For students to achieve at a high level, effective classroom management strategies

must be developed. Classroom procedures have a direct impact on students' academic achievement (Lema, 2024). Students' academic achievement is correlated with the way teachers manage the classroom (Yonas, Rupia, & Onyango, 2023).

According to the teachers, the teaching approach employed by teachers to support students with hearing impairment prioritizes retaining students for better understanding and addressing individual needs. To assure fair access to high-quality education, special attention must be paid to their particular learning requirements and difficulties (Kanwal, Bashir, & Shahzadi, 2023). This student-centred approach involves personalized instruction, adaptive teaching methods, regular assessments, and feedback to ensure students' learning. It greatly improves learning efficacy and student management by offering real-time feedback and individualized teaching material catered to each student (Song, Shin, & Shin, 2024). Additionally, teachers recognize the importance of subject mastery and impairment-balanced teaching in self-contained classrooms. Teachers must be knowledgeable about the instructional strategies, assistive technology and curriculum modification to improve efficacy (Winarsih & Mursita, 2024).

6. Conclusion

In conclusion, existing teaching practices in self-contained classrooms for students with hearing impairments emphasize individualized instruction, visual aids, and sign language integration. Teachers focus on fostering a supportive environment tailored to the unique communication and learning needs of these learners. Despite these efforts, challenges persist, including limited resources, professional development gaps, and the need for enhanced collaboration with families and specialists. To improve outcomes, it is crucial to adopt evidence-based strategies, integrate technology, and provide ongoing teacher training. These steps will ensure inclusive education and better prepare students with hearing impairments for academic success and social integration.

6.1. Recommendations

Following are the recommendations of this study:

1. Regular daily and weekly planning in writing must be provided by the teachers to the school administration as a part of their educational responsibilities.
2. Teachers should follow the student-teacher ratio (STR) in class as per the latest policy provided by the Special Education Department, Punjab.
3. In case of an increased number of hearing-impaired students in the class, the school administration should provide shadow/assistant teachers to class teachers for quality education of students with hearing impairments in self-contained classrooms.
4. The work burden of the class teachers must be monitored by the school heads regularly so that quality standards in special education can be maintained.
5. The special education department should arrange particular and regular training on communicating with the hearing-impaired students to reduce the communication gap between instructors and students.

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