

TEACHER'S OPINION ABOUT CAPACITY BUILDING IN MODIFICATION AND ADAPTATION OF ENGLISH FOR HEARING IMPAIRED STUDENTS AT SECONDARY LEVEL

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Abstract

This research focuses on the opinions of secondary-level teachers regarding the modification and adaptation of English instruction for hearing-impaired students. Recognizing the critical role teachers play in shaping educational strategies, the study explores the challenges and opportunities involved in creating inclusive practices that enhance learning outcomes for this diverse student population. The primary objective of this study is to assess the current state of curriculum adaptation for hearing-impaired students, evaluate teachers' perspectives on capacity building, and investigate how these adaptations affect student engagement and academic performance in secondary-level English classes. A mixed-methods approach was employed, integrating quantitative and qualitative research. Data were collected through structured questionnaires distributed to 68 teachers and 138 students in secondary public schools for the hearing impaired in Multan. The data were analyzed using descriptive statistics, t-tests, and ANOVA. The analysis revealed that while most teachers are knowledgeable about modifying and adapting English instruction for hearing-impaired students, gaps remain in training and resources. Teachers acknowledged the benefits of instructional changes, particularly in student engagement. However, time constraints and inadequate resources posed significant challenges. The overall impact on student performance was positive but varied. The study concludes that effective curriculum modification and adaptation require enhanced professional development, better collaboration with special education professionals, and improved resource availability. While teachers are generally positive about their ability to modify instruction, addressing the identified gaps is crucial to fully support hearing-impaired students in achieving academic success.

Keywords: Teacher's Opinion, Capacity Building, Modification of English, Adaptation of English, Hearing Impaired Students, Secondary Level Education, Special Education

1.1 Background and Context

The role of teachers in adapting English instruction for hearing-impaired students at the secondary level is crucial for ensuring an inclusive learning environment. Studies highlight that tailored approaches, including visual aids and sign language, are essential for enhancing student engagement and communication skills (Smith, 2019). Teachers also emphasize the need for continuous professional development to address the unique challenges posed by hearing impairment in language learning (Jones, 2023). Research shows that flexible strategies and ongoing training enable educators to modify the English curriculum effectively, catering to diverse student needs (McKinney, 2023). Furthermore, the integration of innovative teaching methods and technology has been shown to improve learning outcomes for hearing-impaired students (Cawthon & Leppo 2019). The success of these efforts is contingent on collaboration among teachers, specialists, and stakeholders, fostering a supportive educational environment for hearing-impaired students (Mayberry et al., 2018). These insights inform the ongoing refinement of inclusive educational practices.

1.2 Introduction

The education of hearing-impaired students at the secondary level presents unique challenges, particularly in language instruction, where effective communication is essential. Teachers play a pivotal

role in modifying and adapting the English curriculum to meet these students' needs, using strategies such as visual aids, sign language interpretation, and interactive learning activities (Smith, 2019). These approaches are designed to enhance comprehension and engagement, ensuring that hearing-impaired students receive a quality education. However, the success of these strategies depends heavily on teachers' capacity to adapt and innovate, which underscores the importance of professional development in equipping educators with the skills necessary for inclusive teaching (Jones, 2023). The diverse needs of hearing-impaired students require a multifaceted approach to curriculum development that prioritizes flexibility and accessibility.

The modification of the English curriculum for hearing-impaired students involves addressing not only their linguistic needs but also their broader cognitive and socio-emotional development. Teachers emphasize that inclusive practices should incorporate a variety of learning tools and techniques tailored to individual abilities (McKinney, 2023). This includes adapting instructional materials, assessments, and teaching methodologies to align with the diverse learning styles of hearing-impaired students (Cawthon & Leppo 2019). Research further suggests that inclusive education must extend beyond classroom instruction, fostering an environment where hearing-impaired students feel socially integrated and emotionally supported (Mayberry et al., 2018). The ongoing development of such inclusive strategies is critical to bridging the gap between hearing-impaired students and their peers.

In recent years, the need for capacity building among teachers has gained attention as an essential factor in improving the educational outcomes of hearing-impaired students. Studies show that targeted professional development programs help teachers develop the skills required to adapt their teaching methods effectively (Alico, 2021). These programs focus on enhancing teachers' understanding of the unique challenges faced by hearing-impaired students, enabling them to modify the curriculum in ways that facilitate better communication and engagement (Jones, 2023). Furthermore, collaboration between teachers, specialists, and educational researchers is crucial in ensuring that the strategies implemented are both effective and evidence-based (Bandura, 2018). As the educational landscape evolves, so too must the approaches to teaching hearing-impaired students.

Despite the progress made in understanding and addressing the needs of hearing-impaired students, gaps in research and practice remain. There is a pressing need for more empirical studies that track the long-term effects of curriculum modifications on student outcomes (Miller, 2021). Additionally, the role of technology in facilitating inclusive education for hearing-impaired students has yet to be fully explored (Mayberry et al., 2018). Teachers continue to advocate for increased support, not only in terms of professional development but also in access to resources and technologies that can aid in adapting instruction for hearing-impaired learners (Smith, 2019). By addressing these gaps, future research can contribute to a more comprehensive understanding of how best to support hearing-impaired students in their academic journeys.

1.3 Literature Review

The perspectives of teachers on capacity-building initiatives aimed at adapting English instruction for hearing-impaired students have been extensively explored in the literature. Teachers emphasize the need for specialized training to address the communication challenges faced by these students, such as phonological awareness and incidental learning opportunities (Antia et al., 2020). Additionally, limited access to appropriate educational resources and a shortage of trained teachers further hinder effective instruction (Martinez & Nguyen, 2021). Research highlights that professional development programs tailored to these unique needs, including hands-on training and collaborative learning models, are critical for teacher preparedness and student success (Gibbons et al., 2019). Furthermore, fostering an inclusive classroom environment by incorporating visual aids and assistive technologies significantly enhances learning outcomes for hearing-impaired students (Hadi et al., 2019). Ultimately,

comprehensive capacity-building strategies must focus on continuous teacher support and resource allocation to ensure effective instruction for this student demographic (Smith & Chilton 2019).

1.4 Significance of the Study

This study on "Teacher's Opinion about Capacity Building in Modification and Adaptation of English for Hearing-Impaired Students" holds significance by informing educational policies, enhancing teacher training, and guiding inclusive curriculum development. It aims to foster critical thinking, improve support mechanisms, and contribute to broader inclusive education practices in Pakistan.

1.5 Objectives of the Study

The objectives of the study were to:

1. Determine the present status of the curriculum modification and adaptation of English for hearing impaired students at secondary level
2. Assess the current status of teacher`s perspectives on capacity building in the modification and adaptation of English for hearing-impaired students at the secondary level,
3. Compare the Teacher`s Opinion about Capacity Building in Modification and Adaptation of English for Hearing Impaired Students at Secondary Level on the basis of demographic, gender, qualification, experience and designation.
4. To examine whether the modifications help enhance student participation and interest in learning English
5. To evaluate how the adapted syllabus aligns with the needs and learning styles of Class 9 students.
6. To evaluate whether students have noticed any positive changes in their academic performance.

1.6 Research Questions

The research questions were:

1. What is the current status of curriculum modification and adaptation for hearing-impaired students at the secondary level, with a focus on English instruction?
2. How do teachers perceive the existing practices and challenges in the capacity building for modifying and adapting the English curriculum to meet the needs of hearing-impaired students at the secondary level?
3. What demographic factors, including age, years of teaching experience, educational background, and geographical location, are associated with variations in teachers' perspectives on capacity building for adapting English to the needs of hearing-impaired students in secondary education?
4. How effective are the modifications in the English curriculum for improving the engagement of Class 9 students?
5. How does the adaptation of the English syllabus for Class 9 students affect their learning outcomes?
6. What is the impact of implementing and assessing the English curriculum for Class 9 students on their academic progress?

1.7 Population of the Study

This study, focusing solely on Class 9 in all public secondary schools for the deaf in Multan Division, included 68 teachers and 138 students, using the census method for population selection.

Table 1: Description of Population

| District | No of Secondary Schools/Centers for Hearing Impaired | No. of teachers Male | No. of teachers Female | No of students Male | No of students Female |
|----------|--|----------------------|------------------------|---------------------|-----------------------|
|----------|--|----------------------|------------------------|---------------------|-----------------------|

| | | | | | |
|-------------------------|----|----|----|-----|----|
| Multan | 3 | 3 | 21 | 23 | 16 |
| Khanewal | 5 | 7 | 17 | 26 | 10 |
| Vehari | 3 | 3 | 14 | 30 | 19 |
| Lodhran | 1 | 1 | 2 | 11 | 3 |
| Total | 12 | 14 | 54 | 90 | 48 |
| Grand Total of Teachers | | | | 68 | |
| Grand Total of Students | | | | 138 | |

1.7.1 Sample of the Study

Effective sampling enhances quantitative research reliability, with probability sampling increasing generalizability. However, non-random sampling reduces external validity, limiting population inferences and potentially affecting study accuracy.

Table 2: District/Tehsil Wise Description of Sample

| District | Tehsil | No of Secondary Schools/Centers for Hearing Impaired | No. of teachers Male | No. of teachers Female | Total |
|-------------|--------------------|--|----------------------|------------------------|-------|
| Multan | Multan | 2 | 1 | 16 | |
| | Jalalpur | 1 | 2 | 5 | 24 |
| Khanewal | Khanewal | 2 | 4 | 11 | |
| | Kabir Wala | 1 | 0 | 3 | 24 |
| | Chunnu. Jahanian | 1 | 1 | 2 | |
| Vehari | Jahanian | 1 | 2 | 1 | |
| | Vehari | 1 | 1 | 9 | |
| Lodhran | Burewala, , Mailsi | 1 | 1 | 3 | 17 |
| | | 1 | 1 | 2 | |
| | Lodhran | 0 | 0 | 0 | |
| | DunyaPur | 1 | 1 | 2 | 3 |
| Grand Total | | 12 | 14 | 54 | 68 |

1.8 Instrumentation

For this study questionnaire was based on five types of Likert-Scale. To gather comprehensive insights into the effectiveness of curriculum changes in 9th-grade English classes, a detailed questionnaire was designed for both teachers and students. The teachers' questionnaire is divided into four sections: (a) Demographic Statistics, which collects basic information about the teachers' backgrounds and experiences; (b) Curriculum Modification, which focuses on any changes they have made to the curriculum content or structure; (c) Curriculum Adaptation, which examines how they have tailored the curriculum to meet diverse student needs; and (d) Curriculum Implementation, which looks at the practical application of these modifications and adaptations in the classroom. The students' questionnaire, crafted in Urdu to ensure accessibility and clarity, is also segmented into four parts: (e) Demographic Statistics, gathering information about the students' backgrounds; (f) Effectiveness of Curriculum Modification in English for 9th grade, assessing how changes have impacted their learning; (g) Effectiveness of Curriculum Adaptation in English for 9th grade, evaluating the relevance and suitability of adaptations; and (h) Implementation and Assessment of English, which seeks students' feedback on how the curriculum changes have been executed and assessed. This structured approach ensures a thorough understanding of both teachers' strategies and students' experiences.

1.8.1 Content Validity Index (CVI)

The Content Validity Index (CVI) assessed the research tool's relevance and clarity, with expert teachers recommending minor revisions; the final instrument was refined, reliable, and confirmed through pilot testing.

Table 3: Content Validations

| Sr No. | District | No of Secondary Schools/Centers for Hearing Impaired | Experts from each District |
|-------------|----------|--|----------------------------|
| 1 | Multan | 3 | 3 |
| 2 | Khanewal | 3 | 3 |
| 3 | Vehari | 3 | 3 |
| 4 | Lodhran | 1 | 1 |
| Grand Total | | 10 | 10 |

The study involved a total of ten teachers from four districts in the region, each offering valuable insights on capacity building in the modification and adaptation of English for hearing-impaired students at the secondary level. In Multan, there were three teachers, two from local schools/centers and one from a center in Jalalpur. Khanewal also had three teachers, with one each from centers in Khanewal, Kabirwala, and Jahanian. Similarly, Vehari was represented by three teachers, one from each of the centers in Vehari, Burewala, and Mailsi. Lodhran had one teacher from the Dunyapur Tehsil Center for Special Education. These educators contributed their unique perspectives based on their experiences in special education within their respective districts, enriching the study's findings.

Table 4: Responses of content validation index

| Sr No. | Area | Yes f (%) | NMR f (%) | INR f (%) | No f (%) | Mean |
|--------------|------------|-----------|-----------|-----------|----------|------|
| 1 | Relevancy | 9(90%) | 1(10%) | 0 | 0 | 3.90 |
| 2 | Clarity | 9(90%) | 1(10%) | 0 | 0 | 3.90 |
| 3 | Simplicity | 8(80%) | 2(20%) | 0 | 0 | 3.80 |
| 4 | Ambiguity | 9(90%) | 1(10%) | 0 | 0 | 3.90 |
| Overall Mean | | | | | | 3.88 |

For mean: Scale from 1 to 4 where, yes = 4, NMR (Needs Minor Revision) = 3, INR (Item Needs Revision) =2, No = 1

Table 4 reveals strong positive feedback on the questionnaire's relevance, clarity, and simplicity, with 90% approval and an overall mean score of 3.88. Participants' minor revision suggestions affirm the tool's precision and alignment with evaluators' expectations, indicating it effectively captures intended factors with minimal ambiguity.

1.8.2 Pilot Testing

A pilot study serves as a preliminary phase of research conducted on a smaller scale to refine the research design and methodology before embarking on a full-scale study. The pilot involved four teachers, each from a different district within the Multan Division, namely Multan, Khanewal, Vehari, and Lodhran. Special education schools and centers from these districts were chosen to ensure diverse representation. The main objective of the pilot was to assess the reliability of the research tools and methodology, allowing researchers to identify and address potential challenges that might arise during the larger study. The findings from the pilot were consistent with initial expectations, ensuring the readiness and dependability of the research tools for the subsequent stages.

Table 5: Sample for the Pilot Study

| Sr No. | District | No of Secondary Schools/Centers for Hearing Impaired | Total Teachers |
|-------------|----------|--|----------------|
| 1 | Multan | 1 | 1 |
| 2 | Khanewal | 1 | 1 |
| 3 | Vehari | 1 | 1 |
| 4 | Lodhran | 1 | 1 |
| Grand Total | | 4 | 4 |

1.9 Data Collection Procedure

For the purpose of data collection questionnaire is used separately for teachers and students. The student questionnaire was translated into Urdu to ensure comprehension additionally; a sign language video was

created to further aid understanding for students with hearing impairments. These measures aimed to enhance inclusivity and accessibility in the research process.

In the conducted research, a census method was employed, encompassing both personal interactions and postal methods for data collection. Personally gathered information was complemented by data obtained through postal channels, ensuring a broad spectrum of demographic representation. A meticulously designed questionnaire served as a reliable instrument for comprehensive data gathering.

1.10 Analysis

1.10.1 Demographic Static of Teachers

Table 6: Demographic Information of Teachers

| Sr. No | Description | Frequencies | Percent |
|-----------------------------------|--------------------|-------------|---------|
| Gender | | | |
| 1 | Male | 14 | 20.6 |
| 2 | Female | 54 | 79.4 |
| | Total | 68 | 100.0 |
| Age | | | |
| 1 | 25-32 | 11 | 16.2 |
| 2 | 33-40 | 45 | 66.2 |
| 3 | 41-48 | 12 | 17.6 |
| | Total | 68 | 100.0 |
| District | | | |
| 1 | Multan | 24 | 35.3 |
| 2 | Khanewal | 24 | 35.3 |
| 3 | Vehari | 17 | 25.0 |
| 4 | Lodhran | 3 | 4.4 |
| | Total | 68 | 100.0 |
| Qualification | | | |
| 1 | M.A Spl Edu | 40 | 58.8 |
| 2 | M.Phil | 19 | 27.9 |
| 3 | Others | 9 | 13.2 |
| | Total | 68 | 100.0 |
| Professional Qualification | | | |
| 1 | B.Ed | 18 | 26.5 |
| 2 | M.Ed Spl Edu | 31 | 45.6 |
| 3 | Others | 13 | 19.1 |
| 4 | None | 6 | 8.8 |
| | Total | 68 | 100.0 |
| No of Service Trainings | | | |
| 1 | 1 | 10 | 14.7 |
| 2 | 2 | 14 | 20.6 |
| 3 | 3 | 10 | 14.7 |
| 4 | 4 and More | 34 | 50.0 |
| | Total | 68 | 100.0 |
| Experience | | | |
| 1 | Less than 5 Years | 7 | 10.3 |
| 2 | 5-10 Years | 37 | 54.4 |
| 3 | 11-15 Years | 15 | 22.1 |
| 4 | More than 16 Years | 9 | 13.2 |
| | Total | 68 | 100.0 |

The demographic data of teachers (Table 6) reveals that the majority are female (79.4%), predominantly aged 33-40 (66.2%). Most teachers hold an M.A. in Special Education (58.8%) and have substantial service training (50% with four or more). Nearly half have 5-10 years of experience.

1.10.2 Analysis of the Statements of Teachers

1.10.2.1 Factor A: Curriculum Modification

Table 7: Curriculum Modifications

| Sr | Statement | SD f(%) | D f(%) | UD f(%) | A f(%) | SA f(%) | M | Std |
|----|--|---------|--------|---------|----------|----------|------|-----|
| 1 | Teachers know the modification of English for hearing impaired students at secondary level. | 0(0) | 3(4.4) | 2(2.9) | 44(64.7) | 19(27.9) | 4.16 | .68 |
| 2 | Teachers collaborate with special education professionals to support hearing-impaired students at the secondary level. | 0(0) | 3(4.4) | 9(13.2) | 35(51.5) | 21(30.9) | 4.08 | .78 |

| | | | | | | | | |
|--------------|--|----------|----------|----------|----------|----------|------|------|
| 3 | Teachers receive specialized training for effectively modifying English instruction for hearing-impaired students. | 1(1.5) | 15(22.1) | 10(14.7) | 26(38.2) | 16(23.5) | 3.60 | 1.12 |
| 4 | Teachers can create accessible and inclusive learning materials for hearing-impaired students in English classes. | 1(1.5) | 7(10.3) | 4(5.9) | 44(64.7) | 12(17.6) | 3.86 | .87 |
| 5 | Teachers collaborate with special education professionals to enhance capacity for modifying English instruction for hearing-impaired students. | 0(0) | 6(8.8) | 4(5.9) | 42(61.8) | 16(23.5) | 4.00 | .81 |
| 6 | Teachers believe that modifications in English instruction positively impact the overall academic performance of hearing-impaired students at the secondary level. | 0(0) | 6(8.8) | 9(13.2) | 24(35.3) | 29(42.6) | 4.11 | .95 |
| 7 | The current availability of resources and materials are adequate that support the modification of English content for hearing-impaired students. | 9(13.2) | 37(54.4) | 11(16.2) | 11(16.2) | 0(0) | 2.35 | .91 |
| 8 | Technology plays in facilitating the modification of English content for hearing-impaired students. | 1(1.5) | 4(5.9) | 9(13.2) | 34(50.0) | 20(29.4) | 4.00 | .89 |
| 9 | Teachers seek feedback from hearing-impaired students regarding the effectiveness of modifications made to English instruction in classroom. | 4(5.9) | 4(5.9) | 8(11.8) | 36(52.9) | 16(23.5) | 3.82 | 1.05 |
| 10 | Teachers are satisfied with the modifications made in the English subject for hearing-impaired students. | 11(16.2) | 15(22.1) | 17(25.0) | 19(27.9) | 6(8.8) | 2.91 | 1.23 |
| 11 | Modification of English is more beneficial compared to traditional instruction for hearing-impaired students. | 0(0) | 7(10.3) | 6(8.8) | 43(63.2) | 12(17.6) | 3.88 | .82 |
| Overall Mean | | | | | | | 3.71 | |

The analysis of teacher responses on curriculum modifications for hearing-impaired students indicates strong support for adapting English instruction. Most teachers (64.7%) believe they understand necessary modifications, collaborate with special education professionals, and see positive impacts from these adaptations (overall mean: 3.71). Notably, teachers acknowledge technology's role (mean: 4.00) in facilitating adjustments. However, resource adequacy scored lower (mean: 2.35), with many teachers finding materials insufficient for supporting English modifications. Satisfaction with the modifications had mixed responses, indicating areas needing improvement to enhance inclusivity and effectiveness in instruction for hearing-impaired students.

1.10.2.2 Factor B: Curriculum Adaptation

Table 8: Curriculum Adaptations

| Sr | Statement | SD f(%) | DA f(%) | UD f(%) | A f(%) | SA f(%) | M | Std |
|--------------|---|----------|----------|---------|----------|----------|------|------|
| 12 | Teachers know the adaptation of English for hearing impaired students at secondary level. | 4(5.9) | 3(4.4) | 4(5.9) | 42(61.8) | 15(22.1) | 3.90 | .99 |
| 13 | Teachers include specific adaptations in lesson plans for hearing-impaired students learning English. | 2(2.9) | 4(5.9) | 2(2.9) | 57(83.8) | 3(4.4) | 3.81 | .73 |
| 14 | Teachers receive training on adapting the secondary school curriculum for hearing-impaired students. | 4(5.9) | 6(8.8) | 7(10.3) | 42(61.8) | 9(13.2) | 3.68 | 1.01 |
| 15 | Social inclusion initiatives are tailored to meet the needs of hearing-impaired students in the secondary level. | 2(2.9) | 6(8.8) | 3(4.4) | 43(63.2) | 14(20.6) | 3.90 | .93 |
| 16 | Teachers tailor instructional strategies during curriculum adaptation to address individual student needs. | 3(4.4) | 7(10.3) | 5(7.4) | 37(54.4) | 16(23.5) | 3.82 | 1.05 |
| 17 | Teachers ensure that curriculum adaptations align with educational standards and learning objectives. | 4(5.9) | 8(11.8) | 4(5.9) | 37(54.4) | 15(22.1) | 3.75 | 1.11 |
| 18 | Teachers feel Well-informed about the specific challenges faced by hearing-impaired students in learning English at the secondary level. | 5(7.4) | 4(5.9) | 2(2.9) | 40(58.8) | 17(25.0) | 3.88 | 1.08 |
| 19 | Teachers are comfortable with adapting communication style to better accommodate the diverse needs of hearing-impaired students in English lessons. | 6(8.8) | 6(8.8) | 0(0) | 42(61.8) | 14(20.6) | 3.76 | 1.14 |
| 20 | Teachers participate in professional learning communities or workshops that specifically address the modification of English content for hearing-impaired students. | 4(5.9) | 9(13.2) | 2(2.9) | 35(51.5) | 18(26.5) | 3.79 | 1.15 |
| 21 | Teachers are satisfied with the adaptations made in the English subject for hearing-impaired students. | 18(26.5) | 39(57.4) | 4(5.9) | 4(5.9) | 3(4.4) | 2.04 | .98 |
| 22 | Adapting English is more beneficial compared to traditional instruction for hearing-impaired students. | 4(5.9) | 8(11.8) | 1(1.5) | 39(57.4) | 16(23.5) | 3.81 | 1.11 |
| Overall Mean | | | | | | | 3.65 | |

The analysis of "Curriculum Adaptations" for hearing-impaired students in English language instruction at the secondary level reveals that most teachers acknowledge the need for curriculum modifications. High agreement was observed for statements about understanding adaptation techniques, incorporating

these adaptations into lesson plans, and adjusting instructional strategies to meet individual needs. Teachers largely support social inclusion efforts and align modifications with educational standards. However, satisfaction with existing adaptations remains low, reflecting concerns over effectiveness. Although many teachers participate in professional development to address these adaptations, further improvements could enhance both teacher satisfaction and the educational experience for hearing-impaired students.

1.10.2.3 Factor C: Curriculum Implementation

Table 9: Curriculum Implementation

| Sr | Statement | SD f(%) | DA f(%) | UD f(%) | A f(%) | SA f(%) | M | Std |
|--------------|---|----------|----------|---------|----------|----------|------|------|
| 23 | Current secondary school curriculum addresses the specific learning needs of hearing-impaired students. | 20(29.4) | 34(50) | 3(4.4) | 3(4.4) | 8(11.8) | 2.16 | 1.24 |
| 24 | Assistive technologies utilized to support hearing-impaired students in their secondary level education. | 5(7.4) | 5(7.4) | 8(11.8) | 39(57.4) | 11(16.2) | 3.68 | 1.07 |
| 25 | Individualized education plans (IEPs) are adequately developed and implemented for hearing-impaired students in the secondary level. | 3(4.4) | 10(14.7) | 1(1.5) | 45(66.2) | 9(13.2) | 3.69 | 1.02 |
| 26 | Curriculum modifications for hearing-impaired students is regularly assessed and evaluated. | 3(4.4) | 7(10.3) | 2(2.9) | 46(67.6) | 10(14.7) | 3.78 | .97 |
| 27 | Modifying English assessments is necessary to accurately gauge the proficiency of hearing-impaired students. | 2(2.9) | 4(5.9) | 3(4.4) | 40(58.8) | 19(27.9) | 4.00 | .91 |
| 28 | Teachers believe that a lack of time hinders the ability to effectively modify and adapt English lessons for hearing-impaired students. | 3(4.4) | 5(7.4) | 6(8.8) | 46(67.6) | 8(11.8) | 3.75 | .92 |
| 29 | Teacher's professional training has prepared for addressing the unique needs of hearing-impaired students in an English classroom. | 3(4.4) | 7(10.3) | 7(10.3) | 37(54.4) | 14(20.6) | 3.76 | 1.03 |
| 30 | Teachers believe that ongoing research and advancements in the field of education impact the ability to effectively modify and adapt English instruction for hearing-impaired students. | 4(5.9) | 5(7.4) | 1(1.5) | 44(64.7) | 14(20.6) | 3.87 | 1.02 |
| 31 | Teachers are satisfied with the current level of institutional support provided in modifying and adapting English content for hearing-impaired students at the secondary level. | 10(14.7) | 43(63.2) | 4(5.9) | 6(8.8) | 5(7.4) | 2.31 | 1.06 |
| 32 | The curriculum been adjusted to meet the specific learning needs of hearing-impaired students at the secondary level. | 7(10.3) | 5(7.4) | 1(1.5) | 36(52.9) | 19(27.9) | 3.81 | 1.22 |
| Overall Mean | | | | | | | 3.48 | |

The analysis of "Curriculum Implementation" for hearing-impaired students in secondary English education reveals that only 16.2% of teachers feel the current curriculum effectively meets these students' needs, while 79.4% see it as inadequate (mean = 2.16, SD = 1.24). Although assistive technology use is high (73.6% agree, mean = 3.68, SD = 1.07), only 16.2% report satisfaction with institutional support (mean = 2.31, SD = 1.06). Modifying assessments (86.7% agree, mean = 4.00, SD = 0.91) and implementing Individualized Education Plans (79.4% agree, mean = 3.69, SD = 1.02) are viewed as essential steps, indicating gaps in support for effective adaptations.

1.10.3 Demographic Static of Students

Table 10: Demographic Information of Students

| Sr. No | Description | Frequencies | Percent |
|------------------------------|-------------|-------------|---------|
| Genders | | | |
| 1 | Male | 90 | 65.2 |
| 2 | Female | 48 | 34.8 |
| | Total | 138 | 100 |
| Level of Hearing Loss | | | |
| 1 | Mild | 5 | 3.6 |
| 2 | Moderate | 25 | 18.1 |
| 3 | Severe | 80 | 58.0 |
| 4 | Profound | 28 | 20.3 |
| | Total | 138 | 100.0 |
| Districts | | | |
| 1 | Multan | 39 | 28.3 |

| | | | |
|--------------------------------------|----------|-----|-------|
| 2 | Khanewal | 36 | 26.1 |
| 3 | Vehari | 49 | 35.5 |
| 4 | Lodhran | 14 | 10.1 |
| | Total | 138 | 100.0 |
| Currently Wearing Hearing Aid | | | |
| 1 | Yes | 17 | 12.3 |
| 2 | No | 91 | 65.9 |
| 3 | Sometime | 30 | 21.7 |
| | Total | 138 | 100.0 |

The demographic analysis of hearing-impaired students shows a male majority (65.2%) and a high prevalence of severe hearing loss (58.0%). Most students (65.9%) do not wear hearing aids regularly. Geographically, the students are primarily from Vehari (35.5%) and Multan (28.3%), underscoring potential regional focus areas for curriculum adaptation.

1.10.4 Analysis of the Statements of Students

1.10.4.1 Factor A: Effectiveness of Modification of English for Class 9th

Table 11: Effectiveness of Modification of English for Class 9th

| Sr | Statement | SD f(%) | DA f(%) | UD f(%) | A f(%) | SA f(%) | M | Std |
|--------------|---|---------|----------|----------|-----------|----------|------|------|
| 1 | You are satisfied with the modifications made in English. | 10(7.2) | 1(.7) | 33(23.9) | 80(58) | 14(10.1) | 3.63 | .94 |
| 2 | Modifications encourage your active participation in class. | 7(5.1) | 10(7.2) | 1(.7) | 102(73.9) | 18(13) | 3.83 | .92 |
| 3 | Modification of the English curriculum benefited your learning experience in English Grammar. | 10(7.2) | 7(5.1) | 9(6.5) | 95(68.8) | 17(13.3) | 3.74 | .99 |
| 4 | Modified English subject suits your learning needs effectively. | 8(5.8) | 9(6.5) | 12(8.7) | 82(59.4) | 27(19.6) | 3.80 | 1.01 |
| 5 | Modifications made to the English subject by teachers have improved your overall understanding. | 8(5.8) | 11(8) | 13(9.4) | 77(55.8) | 29(21) | 3.78 | 1.05 |
| 6 | Introduction of the modified English subject positively impacted the participation and engagement of your classmates. | 8(5.8) | 11(8) | 27(19.6) | 60(43.5) | 32(23.2) | 3.70 | 1.09 |
| 7 | You face challenges in modifications made in English | 11(8) | 91(65.9) | 14(10.1) | 10(7.2) | 12(8.7) | 2.43 | 1.03 |
| Overall Mean | | | | | | | 3.56 | |

The data examines the effectiveness of modifications to the English curriculum for 9th-grade students, revealing high satisfaction among participants. Key findings include 58% agreeing and 10.1% strongly agreeing that they are satisfied with the modifications (mean = 3.63, SD = .94). Moreover, 73.9% agree that modifications encourage active participation (mean = 3.83, SD = .92). The modified curriculum benefits English grammar learning, with 68.8% agreeing (mean = 3.74, SD = .99), and 59.4% feel it meets their learning needs (mean = 3.80, SD = 1.01). Challenges, however, are reported by 8%, indicating potential areas for improvement (mean = 2.43, SD = 1.03).

1.10.4.2 Factor B: Effectiveness of Adaptation of English for Class 9th

Table 12: Effectiveness of Adaptation of English for Class 9th

| Sr | Statement | SD f(%) | DA f(%) | UD f(%) | A f(%) | SA f(%) | M | Std |
|--------------|---|----------|----------|----------|----------|----------|------|------|
| 8 | You feel confident in your English writing & reading. | 14(10.1) | 11(8) | 39(28.3) | 35(25.4) | 39(28.3) | 3.54 | 1.26 |
| 9 | Group activities and collaborative projects are helpful in improving English language skills. | 14(10.1) | 13(9.4) | 31(22.5) | 45(32.6) | 32(23.2) | 3.45 | 1.28 |
| 10 | You are satisfied with the teaching of English grammar. | 15(10.9) | 12(8.7) | 39(28.3) | 36(26.1) | 36(26.1) | 3.48 | 1.26 |
| 11 | You are satisfied with the current methods of teaching English. | 16(11.6) | 13(9.4) | 45(32.6) | 45(32.6) | 19(13.8) | 3.28 | 1.17 |
| 12 | You prefer visual aids, such as subtitles or sign language, to enhance your understanding of English. | 13(9.4) | 12(8.7) | 9(6.5) | 54(39.1) | 50(36.2) | 3.84 | 1.26 |
| 13 | You find multimedia resources effective in learning English. | 16(11.6) | 16(11.6) | 4(2.9) | 37(26.8) | 65(47.1) | 3.86 | 1.41 |
| 14 | You face challenges in adaptation made in English | 38(27.5) | 38(27.5) | 10(7.2) | 38(27.5) | 14(10.1) | 2.65 | 1.39 |
| Overall Mean | | | | | | | 3.44 | |

The adaptation of English instruction for 9th-grade students yields mixed effectiveness. Key findings include moderate confidence in reading and writing (28.3% agree and strongly agree, mean = 3.54, SD = 1.26), while 32.6% find group activities beneficial for skill improvement (mean = 3.45, SD = 1.28). Satisfaction with grammar instruction is noted by 26.1% (mean = 3.48, SD = 1.26). Visual aids, such as subtitles, are preferred by 36.2% (mean = 3.84, SD = 1.26), and multimedia resources are valued by 47.1% (mean = 3.86, SD = 1.41). Challenges in adaptation are significant, with 27.5% encountering difficulties (mean = 2.65, SD = 1.39).

1.10.4.3 Factor C: Implementation & Assessment of English

Table 13: Implementation & Assessment of English

| Sr | Statement | SD f(%) | DA f(%) | UD f(%) | A f(%) | SA f(%) | M | Std |
|--------------|--|----------|----------|----------|----------|----------|------|------|
| 15 | You noticed any positive changes in your performance or grades since the introduction of the modified English subject. | 22(15.9) | 17(12.3) | 38(27.5) | 39(28.3) | 22(15.9) | 3.16 | 1.29 |
| 16 | You are comfortable with using assistive devices in English learning. | 25(18.1) | 14(10.1) | 14(10.1) | 53(38.4) | 32(23.2) | 3.38 | 1.41 |
| 17 | You face social challenges related to your hearing impairment in an English classroom setting. | 11(8) | 67(48.6) | 11(8) | 41(29.7) | 8(5.8) | 2.77 | 1.13 |
| 18 | Teachers sought feedback on the modifications to the English subject, and do you feel your input has been considered. | 21(15.2) | 14(10.1) | 22(15.9) | 54(39.1) | 27(19.6) | 3.38 | 1.32 |
| 19 | You feel that the modifications made by teachers are effectively balancing the need for adaptation while adhering to curriculum standards. | 41(29.7) | 20(14.5) | 15(10.9) | 21(15.2) | 41(29.7) | 3.01 | 1.64 |
| 20 | Teaching methods adapted to enhance your understanding of English concepts. | 24(17.4) | 21(15.2) | 14(10.1) | 50(36.2) | 29(21) | 3.28 | 1.40 |
| Overall Mean | | | | | | | 3.16 | |

The implementation and assessment of modified English instruction show a balanced but varied impact. Key findings include 28.3% noticing improvements in performance since modifications (mean = 3.16, SD = 1.29), and 38.4% expressing comfort using assistive devices (mean = 3.38, SD = 1.41). Feedback is valued, with 39.1% feeling their input was considered in modifications (mean = 3.38, SD = 1.32). Social challenges due to hearing impairment were noted by 48.6% (mean = 2.77, SD = 1.13). Teachers' efforts to balance adaptations with curriculum standards are moderately recognized, with 29.7% in agreement (mean = 3.01, SD = 1.64).

1.11 Discussion

The study underscores teachers' ability to adapt English curricula for hearing-impaired students, revealing both strengths and areas for improvement. Although most educators feel confident in making necessary adjustments, gaps in training persist, with 38.3% indicating insufficient specialized preparation. This suggests a need for continuous professional development to enhance support for these students effectively.

Resource limitations significantly hinder instructional modifications, as 67.6% of teachers cite a lack of adequate materials. While collaboration with special education professionals enhances curriculum adaptability, dissatisfaction among 14.7% of teachers points to a need for structured interdisciplinary support. Addressing these issues would promote a more inclusive, supportive environment for hearing-impaired students.

1.12 Conclusion

The study concludes that teachers are skilled in modifying English curricula for hearing-impaired students, with collaboration among educators supporting these efforts. However, challenges such as limited resources and training opportunities persist. Addressing these gaps would empower teachers to more effectively implement inclusive learning materials, benefiting students' academic outcomes.

From the students' perspective, curriculum modifications generally enhance participation and comprehension, especially through visual aids and multimedia. Yet, inconsistencies remain in students' confidence in language skills, highlighting a need for more tailored adaptations. These findings suggest

that refining individualized instructional methods can foster a more universally effective learning environment.

1.13 Recommendations

To better support hearing-impaired students, schools should offer targeted professional development that includes hands-on workshops and mentorship, equipping teachers with the skills to adapt curricula effectively. Investment in specialized teaching resources, like sign language tools and assistive technology, is essential, alongside a centralized hub for easy access to these materials. Encouraging structured collaboration between mainstream and special education teachers will foster inclusive planning. Additional planning time, supported by reducing non-instructional duties, will also aid curriculum modifications. Gathering continuous feedback from students and teachers ensures adaptations are practical and effective. Integrating more visual aids and multimedia in lessons will further support comprehension, while school-wide awareness programs can help create a socially supportive environment.

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