

The Shift to English Medium Instruction: Investigating Teacher Challenges at Elementary School Level

Abdul Qayyum ¹ and Sidra Rizwan ²

¹ Lecturer, Department of Social Sciences, The Education College of Commerce, Sialkot, Punjab, Pakistan.

✉ ndprofphd@gmail.com | [id https://orcid.org/0000-0001-7852-9009](https://orcid.org/0000-0001-7852-9009)

² Assistant Professor, Department of Secondary Teacher Education, Allama Open University Islamabad, Pakistan, Islamabad, Pakistan. ✉ sidra.rizwan@aiou.edu.pk | [id https://orcid.org/0000-0001-6254-5645](https://orcid.org/0000-0001-6254-5645)

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Abstract: The aim of the study was to investigate teachers' challenges at the elementary school level in District Sialkot after shifting to English medium instruction. This research study used a mixed-method design. The study population consisted of all the teachers teaching Social Studies (S.St.), Mathematics (Maths), and Science (Sc) to grades 7 and 8 in District Sialkot. A random stratified sampling technique was applied to select 1,500 elementary school teachers. The number of respondents was divided into two groups, males and females, comprising 722 males and 778 females, while 1,208 were from rural areas and 292 from urban areas. All the selected teachers taught (S.St), (Maths), and (Sc) in English in grades 7 and 8. The results were obtained by using a questionnaire designed on a five-point Likert scale with five closed-ended items related to perceptions about English as a medium of instruction and two open-ended items regarding possible remedies to the problems identified. Data sets were analyzed by frequency, percentage, and independent sample t-test. The findings of the research study showed irrespective of gender; educators found it hard to instruct (S.St), (Maths), and (Sc) after the change of medium of instruction from Urdu to English; instructor problems in rural areas were as prevalent and often more prevalent than those found in urban areas. The study concluded that the introduction of the medium of instruction (MI) of teaching from Urdu to English alone resulted in a deteriorating performance among teachers who were not involved in professional development before this change.

Keywords: English Medium Instruction, Teacher Challenges, (S.St), (Maths) and (Sc), Rural-Urban disparities

Corresponding Author:

Sidra Rizwan

Assistant Professor, Department of Secondary Teacher Education, Allama Open University Islamabad, Pakistan, Islamabad, Pakistan.

✉ sidra.rizwan@aiou.edu.pk

Introduction

The language that is most widely used in the modern world is English. It serves as the common language. English is an international language and is one of the languages spoken throughout the world. It is essential and plays a key function in many aspects of life. This language contains every genre of the current corpus of knowledge. It helps the scientific, technological, literary, and economic domains with their communication and research demands.

Effective teaching and learning processes depend heavily on language (MI). According to (MI), English is the language of the latest knowledge and information, providing resources for advanced and professional study in fields like medicine, the natural and social sciences, engineering, computer sciences, economics, and finance, among others. The significance of English as (MI) is evident even in Pakistan. Aizawa and Rose (2020) assert that English as a (MI) offers a wealth of information across numerous disciplines as well as a channel of contact between various populations. English as (MI) includes effective teaching techniques, dialogue, idea explanations, and student and teacher feedback. Effective teaching is the basic goal of educators in order to improve student learning and impact their lives (Dang & Vu, 2020). English language learning is urgently needed. The nation's trading relations with other

countries determine its level of wealth. English is employed as the lingua franca in corporate interactions, maximizing financial rewards (Pun & Thomas, [2020](#)).

Learning the English language as a means of empowering individuals toward success and financial gain (Sahan et al., [2022](#)). Because English allows learners to express themselves in a variety of ways, someone who is proficient in the language can communicate effectively to accomplish the necessary goals. Those who can write correctly and speak English well enough can work in white-collar occupations. Tanoli et al. ([2021](#)) assert that in order to compete in the global arena, English language instruction (MI) is required at all educational levels. The choice of instructional medium is crucial to good teaching and learning. Implementation of English as a medium of instruction demands appropriate money, instructors' training and feedback from the teachers and the pupils. It is true that teachers typically want to have a positive impact on their students' lives, particularly since improving student learning has been connected to good teaching (Belskaya, [2021](#)). The usage of English as a lingua franca broadens the globe and generates economic gains that contribute to the nation's prosperity. Using English as a teaching language can empower people to achieve financial success (Ismailov et al., [2021](#)). Because English allows for such a wide range of expression, those who are proficient in it can effectively communicate and accomplish their goals.

The basis for secondary, postsecondary, and professional education is laid by elementary education. The lessons that students learn in elementary school become a part of their lives. On April 1, 2009, the federal government of Pakistan decided to switch the language of instruction for math, (Sc), and S.St from Urdu to English in order to keep up with the nation's rapid progress (Government of Punjab, 2009). The necessary outcomes could not be obtained because the action was conducted without enough planning (a twelve-day training workshop was arranged prior to the implementation of English as the (MI). (Sc), S.St and Maths classes were taught by teachers without the proper training (Annual report ASER, 2011).

Literature review

The language of the World Wide Web is English. Learning this language and being proficient in English allows one to connect with more people, opportunities, and resources. English is now extensively spoken worldwide (Briggs et al., [2018](#)). It quickly merges with other languages to form a family of languages as it borrows vocabulary and idioms from them. It is now widely used. In addition, those who speak native languages also use it. Since English encompasses such a wide spectrum of knowledge, learning it is vital at every educational level (Wan & Gao, [2020](#)). English as the medium of instruction (MI) should be implemented in Pakistan's primary schools, which offer a fundamental level of education and call for instructors who are fluent in the language. Following their introduction to English as a second language, the teachers had a new challenge that gave them the chance to study the language in order to teach S.St, Maths, and (Sc) in English (Macaro, [2020](#)).

Teachers are trusted with the task of putting educational innovations into practice because they are viewed as change agents. Resources, time, and ongoing training programs are needed to acquire English for specific objectives. These are needed not only to gain mastery of the subject matter but also to reinforce understanding of effective communication techniques and pedagogy. To ensure that the teaching and learning process is fruitful and efficient, teachers who teach English as an MI must have the appropriate training and refresher courses. In this connection, Kamaşak et al. ([2021](#)) advised that professional traits, including professional practices and professional knowledge, are required for instructors who need to teach in the English language.

Students' future growth is significantly influenced by their elementary school experience. It equips young people for real-world life and offers the foundation for secondary, postsecondary, and professional education. From the elementary school level up to all higher education levels, knowledge accumulates (Knagg, [2020](#)). The Federal government chose to switch from Urdu to English for the teaching of (Sc), S.St, and Maths at the elementary school level in order to keep Pakistan up to date with the rest of the world and to keep pace with global advancements (Government of Punjab, 2009). Without any long-term planning or preparation, the current group of primary school teachers underwent this paradigm change. According to an ASER report from 2011, there were only twelve days



dedicated to teacher training workshops, which did not address issues such as instructor readiness, adequate training time, or facilities for both teachers and students.

According to Wan & Gao (2020), it was challenging for the present generation of elementary school teachers to teach S.St, Maths, and (Sc) in English since they lacked the necessary professional training and language proficiency. Additional factors that contributed to the teachers' difficulty included their lack of training and their poor knowledge of the material. The majority of educators lacked the vocabulary necessary to effectively convey ideas and concepts to students; in fact, many were unable to pronounce words correctly. Because of their inability to properly explain the ideas and concepts, the students had a poor understanding and were unable to ask questions.

English holds a central position as the official language of Pakistan despite the country's multilingual society with four main regional languages: Punjabi, Sindhi, Pashto, and Balochi. However, there is a range in the literate population's written and spoken English proficiency, from good to bad. According to McKinley, & Rose (2022), teaching (Sc), math, and S.St requires a higher level of English proficiency in order to convey ideas and technical vocabulary.

Yani (2022) stated that using English as (MI) caused a lot of issues for the elementary teachers who were already in service. Even if Urdu, or the teacher's mother tongue, was used in the classroom to clarify technical words, it challenged the idea that English was the only language that mattered (MI). It was frequently seen that elementary school instructors of (Sc), math, and S.St were having communication difficulties, which prompted them to request an immediate remedy for the adoption of the English language as (MI). Another barrier to the deployment of English as (MI) was packed classrooms. Maintaining order in the classroom required a lot of time and effort from the teachers. According to ASER (2013), a teacher was required to instruct over 70 kids in the classroom at once. After taking English as a second language, a teacher required additional time to clarify ideas and technical words and could focus more on the struggling readers in smaller class sizes.

English as a (MI) practice was hampered by demographic factors such as geography, gender, teaching experience, and certification. The majority of primary school instructors lacked the necessary training or skills to teach English (Soruç & Griffiths, 2018). Teachers at elementary schools in remote areas had restricted access to language libraries, the Internet, and the newest English language books. Inexperienced educators lacked a thorough understanding of the subjects they were supposed to teach in the classroom. However, primary school pupils also had to deal with a variety of issues, such as poverty, a wide range of socioeconomic backgrounds, illiterate populations, a rigid school schedule, a lack of parental support, etc.

The elementary school instructors, irrespective of their gender, encountered comparable challenges when it came to instructing S.St, Maths, and (Sc) courses in the English language. The teachers' locations had a substantial impact on both student performance in the classroom and English acquisition as (MI). According to Khatri, K. (2019), instructors who teach (Sc), math, and S.St in English in rural areas have greater challenges than those who work in metropolitan areas.

Even though female elementary school teachers are thought to be superior to their male counterparts, they have difficulty taking advantage of training opportunities that are held away from their place of employment (Dang & Vu, 2020). Male teachers had greater exposure to and access to social contact, mobility, the internet, and language libraries. Due to many social and cultural taboos, female teachers have restricted access and mobility. That could have an impact on the teachers' ability to prepare lessons before they teach in the classroom. Litovchenko and Shmeleva (2020) claim that before teaching S.St, Maths, and (Sc) in English, the teacher did not prepare the lesson.

Rose et al. (2021) observed that the teachers may not produce the desired results in the absence of appropriate training programs, ongoing supervision, supportive materials (such as A.V. aids explaining pronunciation concepts and terminology of Maths, S.St, and (Sc) subjects in English), assistance from other English language teachers, a language library, and the internet. A textbook by itself is not sufficient to support language learning or meet the fundamental requirements of educators in terms of elevating the calibre of the teaching-learning process.



Macaro et al. (2017) stated that teachers found it challenging to teach (Sc), math, and S.St in English in the lack of auxiliary materials (language libraries, topic-relevant literature, and A.V. aids). This current circumstance generated the notion of examining the teaching problems at elementary school level preceding the change of (MI) from Urdu to English.

Statement of the problem

In Pakistan, it is assumed that teaching through English as a medium of instruction (MI) language negatively impacts the performances of elementary teachers in S.St, Maths, and (Sc) since the teachers learn primarily from secondary sources during their periods of academic training. Before this change in (MI), proficiency in a second language (English) was not required for professional positions, although it is now required for teaching these classes. This paper will seek to expand on the issues elementary school teachers encounter.

Objectives of the Study

This study attempted to:

- a. Identify the teachers' perception of the transition of MI from Urdu to English in the 7th and 8th grades.
- b. To explore the difficulties encountered by teachers after adopting English as a (MI) in grades 7 and 8.
- c. To determine the difference between the opinions of teachers according to gender and locale teaching grades 7 and 8 after the change in MI.

Research Questions

1. What are the views of teachers teaching S.St, Maths and (Sc) in classes 7 and 8 following the change in the medium of instruction from Urdu to English?
2. What specific challenges do the teachers face while teaching S.St, Maths and (Sc) while using English as (MI) in classes 7 and 8?
3. How can these subject teachers be supported in teaching S.St, Maths, and (Sc) in English after the transition of MI to English?

Research Hypotheses

1. **H₀**: There is no substantial difference in the discernments of male and female teachers of grades 7 and 8 after the transition of the medium of instruction (MI) from Urdu to English.
2. **H₀**: There is no substantial difference in the discernments of urban and rural teachers of grades 7 and 8 after transitioning the medium of instruction (MI) from Urdu to English.

Significance of the Study

It is a research study which attempts to elicit perceptions of teachers in grades 7 and 8 after the transition of MI in English. This research may contribute towards teachers' learning experiences by pointing out the language problems that teachers face after a changeover in the medium of instruction from Urdu to English. The professional development programs may also need to be changed so that they reflect the emerging needs of this particular learning context for head teachers, curriculum and policy developers, and teacher trainers.

Delimitation of the Study

The research targeted public sector elementary school teachers in Sialkot. District Sialkot is a typical example of what Pakistan's overall socioeconomic as well as education landscape looks like.

Methodology

The study was quantitative in nature, and a cross-sectional survey research design was employed.



Population

The population included 2,580 teachers who were working in 245 public sector Elementary schools in the Sialkot region. Of these, 1,140 were males and 1,440 females. The males included 218 urban and 922 rural, while the number of female teachers included 150 urban and 1,290 rural. The following table shows the details of the population scatter.

Table 1

Tehsil wise population of the study

Tehsils	Schools				Total	Teachers				Total
	M		F			M		F		
	U	R	U	R		U	R	U	R	
Sialkot	6	23	7	57	93	93	286	110	533	1022
Daska	1	22	2	37	62	68	251	14	312	645
Sambrial	1	9	1	16	27	31	107	17	130	285
Pasrur	1	24	2	44	71	28	292	14	298	632
Total	09	78	12	154	253	220	921	151	1258	2584

Source: Government of the Punjab, Pakistan

M: Male, F: Female, U: Urban, R: Rural

Sample

The sample was collected through stratified random sampling. The study sample comprised of 1500 teachers teaching the subjects of S.St, Maths and (Sc) at the elementary level in English. The sample was made of 722 males, which amounts to 48.13%, 778 females, who were 58.9%, 1208 rural respondents, who accounted for 80.5%, and 292 urban respondents, who were 19.5%.

The table below provides the details of the sample.

Table 2

Tehsil-wise sample of the study

Tehsil	M		F		Total
	U (1)	R (2)	U (1)	R (2)	
Sialkot	73 (78%)	159 (59%)	86 (88%)	226 (41%)	522
Daska	56 (84%)	152 (60%)	14 (100%)	175 (56%)	394
Sambrial	28 (93%)	80 (75%)	14 (88%)	97 (75%)	219
Pasrur	24 (89%)	165 (56%)	12 (100%)	169 (56%)	365
Total	181	556	126	667	1500

M: Male, F: Female, U: Urban, R: Rural

Instruments

Questionnaires with a 5-point Likert scale were developed to solicit comments containing five closed-ended items and two open-ended questions. The experts also validated the scale. Cronbach's alpha was used to test the reliability of the questionnaire, with an acceptable result of 0.76.

Analysis

Analysis of Closed-ended items

Frequency distribution was used to analyze the opinions of teachers teaching S.St, Maths. and (Sc) in elementary schools.



Table 3*Opinions of elementary school teachers about English as (MI)*

S. No	Statement	Level	Frequency	Percentage
1	After shifting to an English Medium of instruction..... at the elementary school level	Always	145	10.2
		Often	216	14.7
		Sometimes	112	9.1
		Seldom	610	40.1
		Never	417	27.2
2	Shifting to an English Medium of instruction has unfavorably affected...	Always	965	63.8
		Often	227	15.6
		Sometimes	79	5.8
		Seldom	112	7.2
		Never	117	7.5
3	Shifting English Medium instruction..... as associated with Urdu	Always	482	32.1
		Often	665	42.7
		Sometimes	72	5.4
		Seldom	232	15.1
		Never	69	4.6
4	All the teachers teach..... effectually	Always	151	10.1
		Often	132	9.2
		Sometimes	116	7.7
		Seldom	736	48.7
		Never	365	24.6
5	Teachers ... English Medium instruction.	Always	148	10.1
		Often	130	8.7
		Sometimes	154	10.2
		Seldom	512	34.1
		Never	556	37.1

Table 3 summary based on the frequency and percentage answers Statement 1: "After shifting to English from Urdu as (MI), the teachers have no issue teaching S.St, Maths, and (Sc) at grades 7 and 8." Positive responses were in the minority as the most considerable percentage indicated disagreement at (67.2%), followed by affirmative responses from only (24.8%), and uncertain opinions accounted for (9.0%). They found that their challenges in teaching (Sc), S.St, and Maths followed shortly after the adoption of English as a medium of instruction. Statement 2: English as MI has impacted teachers' instructions to teach (Sc), S.St, and Maths to grades 7 and 8. The majority agreed with this statement at 79.2%, followed by the uncertain group at 5.8% and the disagreeing lot at 14.8%. Statement 3 While a majority (74.8%) agreed, 5.3% were undecided, and 19.8% disagreed that "English as a medium of instruction (MI) is difficult as compared to Urdu. " According to the results of statement 4, "All the teachers teach S.St, Maths, and (Sc) in English effectively," 53.3% of respondents disagreed with the assertion, 7.5 percent were unsure, and 19.2% agreed. 71.1 percent disagreed with statement 5, "Teachers are not concerned about English as (MI)," while 10.0 percent were unsure and 18.7 percent agreed.

This study compared gender and locale-wise opinions of teachers teaching S.St, Maths, and (Sc) to grades 7 and 8 regarding English as a Medium of Instruction (MI) by using independent samples t-test.



Table 4*The gender-wise difference in opinions of teachers related to MI*

Gender	N	Mean	Std. Deviation	F	df	t-value	Sig (p-value)
Male	695	21.38	20.806	2.570	1530	2.995	.109
Female	835	213.24	20.133				

 $\alpha = 0.05$

Table 4 shows that the difference is not significant since t-value = 2.9 is only at $p = .109$, greater than the critical value of 0.05. Thus, there is no significant difference between the opinions of male and female teachers of S.St, Maths, and (Sc) regarding the shift in the medium of instruction from Urdu to English. Hence, H_0 is accepted, which reveals that teachers faced challenges while teaching (Sc), S.St, and Maths because of the change in MI, regardless of gender.

Table 5*Location (rural/urban) difference related to English as (MI)*

Area	N	Mean	Std. Deviation	F	df	t-value	Sig (p-value)
Rural	1052	213.17	21.319	6.666	1530	-4.349	.010
Urban	478	218.08	18.196				

 $\alpha = 0.05$

Table 5 reports that the obtained t-value is -4.3 with a p-value of .010 and the predetermined level of significance at 0.05. Since the obtained p-value, in this case, .010, is smaller than the critical value at 0.05, it is concluded that the difference is significant. It reflects a vast difference in the opinion of elementary teachers residing in rural and urban areas towards the shift of medium of instruction from Urdu to English. The mean difference indicates more difficulties are faced by the teachers belonging to rural areas in teaching S.St, Maths, and (Sc) in English than their urban counterparts.

Analysis of Open-ended Items

Q No. 1: What kind of challenges are the teachers teaching at the elementary school level facing in teaching S.St, Maths and (Sc) in English after shifting English to (MI)?

The teachers responded to the open-ended questions. The findings are presented in percentages as follows:

- When a change occurs, and English automatically replaces the prior MI Urdu without any previous teacher training, 797 respondents reported difficulties in teaching (Sc), S.St, and Maths because of the adoption of English as an MI.
- Reporting inadequate proficiency in the English language: 679 persons (45.2%).
- The result revealed that 654, or 43.6% of the teachers reported that pupils experienced various difficulties when they learned through English as a medium of instruction (MI).
- Weakness in the English language culminated in cases where 639, or 42.6% of the teachers' reported cases of reduced confidence levels.
- Due to the massive and diverse syllabi of subjects S.St, Maths, and (Sc), 619 (41.3%) teachers felt teaching these subjects at elementary levels was difficult.
- According to the views of 596 teachers, the introduction of English as the medium of instruction is an added burden on the already hectic workload of S.St, Maths, and (Sc) teachers.
- As English is adopted as the medium of instruction, 584 teachers, or 38.7%, perceived that the communication problem reduced student-teacher interaction inside the classroom for teaching S.St, Maths, and (Sc).
- After the change of the medium of instruction from Urdu to English, 573 teachers reported the following: In S.St, Maths, and (Sc), there was almost unanimously agreed that pupils could not easily understand what was explained in English, which, therefore, tended to encourage rote memorization among the students.



9. Switching to the medium of instruction in English prompted 556 teachers, or 37.1%, to answer that teaching (Sc), S.St, and Maths in English had slowed down the speed of instructions and completion of the syllabus on time.
10. Overcrowding courses proved to be a deterrent to the implementation of English, according to 545 teachers or 36.3%.
11. In this regard, teaching S.St, Maths and (Sc) in English after the shift from Urdu, 529 respondents (35.3%) opined that learning materials were not enough, that is, relevant books, handbooks, online references, and audio-visual materials for the teachers.
12. 517, or 34.5%, of the teachers asked for enough training in professional development for the simple reason that in the absence of training, the newly introduced MI may be reverted to Urdu.
13. The introduction of English as MI 509 teachers revealed that the shift in MI made learning even more burdensome and costly for students, as now, they have to pay tuition to cover up what they had fallen behind in the subject matter.

Q No. 2: How can the teachers teaching S.St, Maths and (Sc) in English be facilitated to adjust to teaching after shifting to English as (MI)?

1. Teacher continuing professional development.
2. Additional supports such as books and handbooks in related subjects are provided to the teachers for delivery of S.St, Maths, and (Sc) in English.
3. Teachers would receive adequate in-service training for the good usage of the English language as a mode of instruction; in case of in-service education is not possible, then the medium may be reverted to Urdu.
4. The number of students in the classroom should be between 20 to 25 students.

Discussion

Collected data revealed that teaching of S.St, (Sc), and Maths at the elementary school level with English as a Medium of Instruction posed difficulties for the teachers. Elementary school teachers felt that the teaching task of S.St, Maths, and (Sc) was even more challenging in English than in Urdu. The teaching problems confronted by male and female teachers while teaching S.St, Maths, and (Sc) are parallel, and both males and females were exposed to the same teaching problems. As per Khatri (2019), rural teachers found teaching S.St, Maths, and (Sc) much more difficult as these subjects were taught in English after the change of medium of instruction from Urdu.

McKinley & Rose (2022) noted that by teaching subjects like S.St, Maths, and (Sc) in the medium of English, classroom learning engagement is reduced as the medium of instruction is shifted from Urdu to English. The change in MI was initiated without proper professional development of teachers, which made them apprehensive of such an initiative. The change in the medium of teaching from Urdu to English resulted in lowering the confidence of teachers in elementary school, particularly in imparting S.St, Maths, and (Sc). Teachers felt difficulties in teaching subjects in the English language at the elementary level. The teachers did not prepare any lesson plan before teaching S.St, Maths, and (Sc) in English. Sumipo (2020) states that teachers were not bothered about preparing a lesson plan. Further, the results of the study indicated that teachers needed appropriate professional development training to get used to the new English Medium of Instruction; if appropriate professional development training is not available, the MI may be reverted to Urdu. Tai & Wei (2023) also reported that, without supplementary resources (language libraries, subject-specific texts, and audiovisual aids), teachers faced difficulties in teaching Maths, S.St, and (Sc) in English. The male and female teachers found the teaching of S.St, Maths, and (Sc) in English very problematic. Overcrowded classes were another reason English was introduced as a medium of instruction in schools. The overcrowding of classes compelled the teachers to spend sufficient time dealing with the student's discipline. ASER (2013) highlighted that under normal circumstances in the classroom, more than 70 students were expected to be taught by a single teacher.



Conclusions

The results demonstrated that the medium of instruction (MI) in the form of English has been applied is more advanced than Urdu. The introduction of the medium of instruction (MI) by changing from Urdu to English negatively affected the teaching process of S.St, Maths, and (Sc) in grades 7 and 8 by teachers. Introducing English as a Medium of Instruction (MI) has increased the workload of elementary school teachers. The teachers' self-confidence in imparting S.St, Maths, and (Sc) through the medium of English was reduced due to communication breaks with the students in the class. The implementation of the use of English as the medium of instruction has adversely affected elementary instructors who teach S.St, Maths, and (Sc). Teachers found it difficult to explain technical language, concepts and ideas in S.St, Maths, and (Sc) in English. The lack of teacher preparation has, in turn, caused a failure to fully understand subjects like S.St, Maths, and (Sc) in English since the shift to English as the Medium of Instruction (MI). Teachers in grades 7 and 8 have had problems with class preparation for S.St, Maths, and (Sc) due to low levels of enthusiasm, effectiveness, training, and workload. Teachers displayed little interest in teaching S.St, Maths, and (Sc) regularly during the school day in English. Teachers' inability to define clear concepts and words made it hard for the students to understand what they were saying. After the shift in the medium of instruction, even literate parents could no longer help their children with any academic issues. The adoption of the medium of instruction in English increased the cost of education since students had to seek extra tuition to complement the inadequacies in their studied subjects. After embracing the medium of instruction as English, effective communication and interaction between teachers and students is also limited.

Recommendations

In the light of the findings of the present study, the following are the recommendations:

1. In-service training programs may be arranged, to facilitate (Sc), S.St, and Maths teachers in overcoming the language barrier encountering them.
2. These teachers may be provided with supplementary materials such as books (applicable), handbooks, online resources, and audio-visual aids to teach S.St, Maths, and (Sc) in English.
3. Professional development training for teachers may be focused on dealing with the shift in the medium of instruction and the challenges it poses for the teachers.
4. If such development is not possible, then it is suggested that the medium of instruction be reverted to Urdu.



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