

The Translation Bottleneck: Decoding Linguistic Hurdles in Maharashtra's Polytechnic Classrooms

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Abstract - For many students in Maharashtra, the jump from school to a technical diploma is more than just a change in subjects; it is a sudden shift in language. For most of these students, Marathi is their mother tongue (L1), and moving into an English-medium engineering course brings up significant linguistic challenges. This paper provides a deep analysis of how Marathi (MTI) affects the way these students learn English (L2), specifically looking at the everyday realities of polytechnic students and their lecturers. The research examines how regional language habits interfere with English sounds, sentence structures, and word meanings in classrooms, lab journals, and campus interviews. Set in the context of semi-urban and rural areas like Sangamner, the study offers localized and practical teaching methods. These strategies are designed to help lecturers bridge the communication gap, ensuring that a student's technical skills are not hidden by a language barrier.

Index Terms - Mother Tongue Influence (MTI), Marathi L1, Second Language Acquisition (SLA), Polytechnic Education, MSBTE, Technical Communication, Phonological Interference, Syntactic Error, Mingleish, Vernacular Medium.

I. INTRODUCTION TO THE TECHNICAL EDUCATION LANDSCAPE

The first chapter sets the stage by highlighting the high stakes of English proficiency within the MSBTE and the demographic hurdles students face.

The Crucial Role of English in Technical Diplomas

Engineering and technology have made English the undisputed global language of the profession. Whether a student is pursuing a diploma in Computer Science, Mechanical, Civil, or Electronics, technical knowledge alone isn't enough; they must be able to communicate that knowledge clearly. In the MSBTE system, English is everywhere; it's the medium for textbooks, lab manuals, and the key to getting hired during campus placements. However, a student's mother tongue (L1) naturally influences how they pick up this second language (L2), a process known as Mother Tongue Influence (MTI), which is a natural part of Second Language Acquisition (SLA).

The Demographic Reality of MSBTE Students

The demographics of polytechnic institutes across Maharashtra tell a specific story. Many students join these programs after the 10th standard (SSC), coming from Marathi-medium or semi-English backgrounds. In semi-urban or rural hubs like Sangamner, students rarely hear or speak English outside of their textbooks.

When these students start their diploma, they are suddenly hit with complex subjects like thermodynamics or circuit theory taught entirely in English. This creates a "translation bottleneck":

- The student hears a technical concept in English.
- In their mind, they mentally translate it into Marathi to understand it.
- They then try to translate their thoughts back into English to respond.

This loop causes cognitive exhaustion and often hides the student's true technical potential.

Objectives of the Research Paper

This paper is designed as a practical resource for both students and lecturers to navigate these challenges. The main goals are:

- Pinpoint phonetic errors: Identifying specific pronunciation mistakes made during viva voce and presentations.
- Analyze writing mistakes: Dissecting grammatical errors found in lab journals, micro-projects, and exams.
- Address psychological walls: Understanding the fear and lack of confidence that stems from language interference.
- Support lecturers: Providing teaching strategies that fit the actual MSBTE "Communication Skills" curriculum.

II. THE CURRICULUM AND THE COMMUNICATION GAP

The MSBTE curriculum acknowledges the language deficit among its students and has strategically placed specific subjects to address it.

Analyzing the MSBTE Language Curriculum

- The MSBTE includes subjects like "Communication Skills (English)" (Subject Code: 311303) and "Professional Communication" (Subject Code: 312002) to improve student communication.
- The goal is to ensure students reach a professional level of English.
- But a gap exists between these goals and the reality of the classroom.
- While the syllabus asks for technical reports and presentations, many lecturers find that students are still struggling with basic grammar and tenses.
- When students try to explain technical items, like a lathe machine or C++ code, they still use a Marathi structural framework.

The "Translation" Bottleneck in Technical Learning

- Since polytechnic students must learn practical skills fast, they often turn to rote memorization.
- They might learn a definition by heart without truly understanding how the English sentence is put together.
- This leads to a difficult five-step mental process during practical exams: listening to a question, translating it to Marathi, thinking of the answer in Marathi, translating it back to English, and then speaking
- This mental translation is slow, full of errors, and heavily restricted by Marathi grammar rules.
- Because of this, students often speak with hesitation, which hides their actual technical knowledge from examiners.

III. PHONOLOGICAL INTERFERENCES (SOUND SYSTEM CHALLENGES)

Phonology studies how sounds are organized within a language. A core conflict exists because the Marathi alphabet (Varnamala) is perfectly phonetic, one reads exactly what is written, while English is highly unphonetic. This difference creates severe pronunciation challenges that can lead to miscommunication during technical presentations.

Vowel Confusion in Technical Terms

The Marathi alphabet (Varnamala) uses clear, distinct vowels, while English relies on complex gliding sounds called diphthongs (where two vowel sounds glide together). This leads to two main problems:

- **The Vowel Shift:** Students often struggle to distinguish between the short 'a' and 'e' sounds. In a computer lab, "RAM" might be pronounced as "REM," or "panel" as "penel".
- **Flat Vowels:** English words like phase or gate require a gliding sound. Marathi speakers tend to flatten these, making "phase" sound like "fez," which can sound unprofessional in an engineering context.

Replacing Consonants in the Workshop

When an English sound doesn't exist in Marathi, the student's brain automatically swaps it for the closest Marathi sound.

- **The V vs. W Merger:** This is the most frequent error. English distinguishes between /v/ (teeth on lip) and /w/ (rounded lips). Since Marathi only has 'व' (va), students often say "walve" for "valve" or "vire" for "wire".
- **Hard T and D Sounds:** English /t/ and /d/ are made by touching the tongue just behind the teeth (alveolar). Marathi uses hard retroflex sounds ('ट' and 'ड') where the tongue curls back. This makes technical words like "Data" or "Terminal" sound very heavy and impactful.
- **The "Th" Swap:** Marathi lacks the soft English /θ/ (as in theory). Students substitute it with the aspirated dental 'थ' (tha), or use 'द' (da) for words like therefore.

Rhythm: Syllable-Timed vs. Stress-Timed

The rhythmic structure of the two languages differs fundamentally.

- **Robotic Delivery:** Marathi is syllable-timed, meaning every part of a word gets equal time. English is stress-timed, where we emphasize certain syllables and rush over others. When students read project reports, they often give every word equal weight, making them sound monotonous.
- **Incorrect Word Stress:** In English, changing which syllable you stress can change a word's meaning (e.g., PRO-ject as a noun vs. pro-JECT as a verb). Marathi speakers tend to stress the first syllable of every word out of habit, which can confuse recruiters during interviews.

IV. MORPHOLOGICAL AND SYNTACTIC INTERFERENCES (GRAMMAR IN TECHNICAL WRITING)

While phonetics affects speech, syntax dictates the rules for constructing meaningful sentences. Massive structural differences between Marathi and English lead to the most visible errors in student exam papers and lab journals.

The Structural Flip: SOV vs. SVO

The massive difference in how sentences are built is the root of many student errors.

- **English Rule (SVO):** Subject + Verb + Object. Example: "The engineer repaired the motor".
- **Marathi Rule (SOV):** Subject + Object + Verb. Example: "Engineer-ne motor durust keli".
- **The Conflict:** When writing lab manuals, students often default to the Marathi order, writing things like "I the circuit diagram drawn" instead of "I drew the circuit diagram".

Missing and Misused Articles

Marathi doesn't have direct equivalents for "a," "an," or "the," leading to two main errors:

- **Omission:** Students often drop articles entirely, writing "Operating system is interface..." instead of "An operating system is the interface...".
- **The "One" Habit:** Since Marathi uses "ek" (one) for single items, students say "I need one multimeter" instead of "a multimeter".

Prepositions vs. Postpositions

In English, prepositions come before the noun (e.g., in the lab). In Marathi, these are "postpositions" attached to the end of the noun (e.g., lab-madhe). Because they are separate words in English, students often mix them up:

- **Incorrect:** "Connect the wire in the terminal".
- **Correct:** "Connect the wire to the terminal".

The "Understanding" Trap (Continuous Tense)

In Marathi, it is common to use the continuous tense for a state of mind. However, in English, "stative" verbs like know, want, or understand are rarely used with "-ing".

- The Error: Students frequently say, "Sir, I am not understanding this program".
- The Reason: The correct form ("I do not understand") feels incomplete to a Marathi speaker because it lacks the "ongoing" emphasis they use in their mother tongue.

Question Inversion

To ask a question in English, you must swap the subject and the verb (e.g., "Are you...?"). In Marathi, you simply change your tone or add a word at the end.

- The Result: Students often ask questions using statement word order: "Sir, you will check my journal?" instead of "Will you check my journal?"

V. SEMANTIC AND LEXICAL INTERFERENCES (VOCABULARY AND DIRECT TRANSLATION)

Semantics involves the study of word meanings, and technical accuracy often breaks down when a student maps a Marathi word directly onto an English word.

Literal Translation (Word-for-Word Errors)

When students translate Marathi idioms or phrases directly into English, it often leads to grammatically bizarre or repetitive sentences.

- "Give" vs. "Take" an Exam: In Marathi, the phrase is *Mi pariksha dili* (I gave the exam). However, in English, an institution gives the exam, and a student takes it. This results in the universal error: "I have to give my MSBTE exam next week".
- Reduplication for Emphasis: Marathi uses repeated words to add weight, such as *hote hote* or *chote chote*. Students often carry this habit into English, writing "Break the material into small small pieces" or "Rotate the knob slowly slowly". In professional technical writing, these should be "tiny pieces" or "gradually".
- Kinship and Titles: Translating respect titles directly leads to phrases like "cousin brother" instead of just "cousin," or addressing a female lecturer as "Teacher Madam" instead of "Professor".

Misuse of Collocations in Technical Contexts

Collocations are groups of words that naturally pair together in a language. Marathi L1 speakers frequently use the wrong English verb because they are thinking of the Marathi verb.

- Mechanical Context: A student might say "Put the brakes" (translating *break lavne*) instead of the correct phrase, "Apply the brakes".
- IT Context: A computer science student might say "Start the program" (translating *program chalu kara*) instead of the professional term, "Run the program".
- General Context: It is very common to hear "Do a mistake" (translating *chook karne*) instead of "Make a mistake".

VI. SOCIO-CULTURAL AND PSYCHOLOGICAL FACTORS IN POLYTECHNICS

To truly address Mother Tongue Influence (MTI), it is necessary to look beyond grammar and understand the psychological environment of a diploma college. In India, language is not just a tool; it is deeply tied to identity and social status.

The "Vernacular" Inferiority Complex

In the Indian context, English proficiency is often viewed as a marker of social status. When students from rural areas enter a polytechnic institute, they often experience:

- Social Hierarchy: Encountering peers from urban, English-medium schools can create an immediate sense of being "lesser".
- Fear of Ridicule: The fear of being mocked for mispronouncing words like "chemistry" or using the wrong tense can be paralyzing.
- Hyper-awareness: Students become so focused on their Mother Tongue Influence (MTI) that they lose the confidence to speak at all.

The Silent Classroom Syndrome

Psychologists call this a "high affective filter", essentially a mental block caused by anxiety.

- The Participation Gap: A student might know the answer to a complex thermodynamics question but will refuse to raise their hand.
- Mental Lag: While the student is busy formulating a sentence in Marathi, translating it to English, and checking the grammar, the lecturer has already moved on.
- Misinterpretation: Lecturers often mistake this silence for a lack of technical knowledge, which is a tragic misunderstanding of the student's actual talent.

The Pressure of Campus Placements

The stakes are highest during final-year interviews with multinational companies like Tata Motors or L&T.

- Communication over Coding: HR recruiters expect a baseline of clear English for teamwork and reporting.
- The Articulation Penalty: A student may be able to reassemble an engine flawlessly, but if they cannot explain the process in English, they are often overlooked.

- Skill vs. Speech: This creates a scenario where more articulate students get hired over peers who have superior practical engineering skills.

VII. PEDAGOGICAL STRATEGIES FOR LECTURERS (THE MSBTE ACTION PLAN)

Traditional grammar drills are often ineffective for polytechnic students; instead, lecturers require applied, localized strategies to bridge the communication gap. This chapter outlines an action plan to help students overcome Mother Tongue Influence (MTI).

Using Contrastive Analysis

Instead of banning Marathi, lecturers should use it as a strategic tool to highlight linguistic differences.

- The Whiteboard Strategy: Write a sentence in Marathi (e.g., *Mi code lila*), then the literal translation (*I code wrote*), and finally the correct English SVO structure (*I wrote the code*).
- Demystifying the Error: This visual contrast helps the student realize they aren't "bad at English"; their brain is simply applying the wrong structural rule.

Integrating Technical English (ESP)

English should not be taught as a separate, isolated subject but as a professional tool for engineering.

- Discipline-Specific Glossaries: English and technical lecturers should collaborate to create pronunciation guides for specific terms like "Oscilloscope" or "Surveying".
- Mock Technical Vivas: Instead of general debates, lecturers should conduct practice vivas where students explain their actual projects or Java programs.
- Professional Phrasing: When a student uses repetitive Marathi-style emphasis (e.g., "continuously continuously"), the lecturer should gently suggest professional alternatives like "infinitely".

Remedial Phonetics

Focusing on the physical way sounds are made can help correct long-standing pronunciation habits.

- Minimal Pair Drills: Practice words that sound similar, but change based on one sound, such as "Vine/Wine" or "Vest/West," to fix /v/ and /w/ confusion.
- Physical Training: Show students how to bite their bottom lip for "Valve" or round their lips for "Wire". These physical cues can override Marathi phonetic programming.

Creating a Safe Linguistic Environment

The classroom must be a place where students feel safe enough to make mistakes.

- Fluency First: During the first semester, praise the effort to speak English, even if the grammar is broken.
- The Modelling Technique: If a student says, "Sir, machine not working," don't scold them. Instead, acknowledge the technical point and then repeat the correct sentence: "I see, the machine is not working".

VIII. ACTION PLAN FOR POLYTECHNIC STUDENTS

While lecturers play a vital role, students must take ownership of their linguistic transition, as the 45-minute English lecture alone is insufficient. This chapter outlines practical habits students can adopt to minimize Mother Tongue Influence (MTI).

The "Think in English" Paradigm Shift

The single most important step for a student is to stop the habit of mental translation.

- Self-Talk: Students should practice narrating their daily technical tasks in English inside their heads.
- Real-world Practice: While walking to college or working in the lab, thinking phrases like "I am opening the software" helps the brain generate English directly.
- Breaking the Habit: Over time, this forced narration causes Marathi-style structural errors (SOV) to fade away.

Immersive Technical Listening

Since rhythm and pronunciation cannot be mastered through textbooks alone, students must change their digital habits.

- YouTube as a Language Lab: Most MSBTE students already use YouTube for technical help.
- The Switch: Students should avoid tutorials in Hindi or Marathi and instead watch international or Indian speakers who use English.
- Training the Ear: Consistent listening helps students absorb correct word stress, natural sentence flow, and technical phrasing (collocations).

Embracing the "Drafting" Process in Lab Manuals

- Writing technical reports should not be a one-time effort; it requires a systematic approach.
- Step 1: The Brain Dump: Write the procedure down quickly without worrying about grammar or perfection.
- Step 2: The MTI Check: Go back with a red pen and look specifically for known Marathi-based errors.
- Self-Correction: Students should check if they used "one" instead of "a," placed the verb at the end of the sentence, or used the continuous tense incorrectly.

Leveraging the Language Laboratory

Students should treat the college language lab as a gym for their voice, not just a place to pass a practical exam.

- Recording Practice: Use the available software to record your own voice.

- Active Comparison: Compare your pronunciation of technical terms against standard audio files to identify where your Marathi phonetic habits are still interfering.

IX. THE IMPACT OF MTI ON CAREER TRAJECTORIES

Overcoming Mother Tongue Influence (MTI) is not about erasing your Marathi identity or adopting a fake accent. It is strictly about achieving "Global Intelligibility" in professional settings.

Professionalism, Not Perfection

It is a common misconception that overcoming MTI means erasing your culture.

- Identity Preservation: The goal is not to stop being Maharashtrian or to develop an American accent.
- Global Intelligibility: The focus is strictly on being understood in a professional setting.
- Professional Competence: Recruiters view heavy MTI as a sign of lower professionalism, even if the student is technically brilliant.

Meeting Corporate Expectations

Companies like Bajaj Auto, L&T, and Tata Motors hire diploma holders to work in integrated global supply chains.

- Communication as a Tool: A technician must be able to read English manuals and write daily shift reports that anyone in the company can understand.
- Cross-Regional Collaboration: Employees often report to managers who do not speak Marathi, making English the only shared language.
- Example of Impact: Writing "The machine doing heavy noise" instead of "The machine is making a loud noise" can make a skilled technician look less competent to their supervisors.

The Academic Leap (B.E. / B.Tech)

For many, the diploma is just the first step toward an engineering degree.

- Higher Volume: Degree programs require significantly more English writing and complex reading than diploma courses.
- Smoother Transition: Students who actively work on their English during their polytechnic years find the shift to a degree college much easier.
- Cognitive Focus: By reducing the language barrier early, students can spend their energy grasping advanced engineering concepts rather than deciphering textbooks.

X. THE DIGITAL ECHO CHAMBER: SOCIAL MEDIA AND THE RISE OF "MINGLISH"

In the modern educational landscape, a student's linguistic environment is largely dictated by their smartphone. For MSBTE polytechnic students, the digital world reinforces Mother Tongue Influence (MTI) through unique challenges.

The Illusion of English Typing: Transliteration on WhatsApp

The most frequent writing activity for diploma students is chatting on platforms like WhatsApp or Instagram, where they rarely use formal English.

- The Process: Students use the English alphabet to type Marathi words—a process known as transliteration.
- MTI Reinforcement: A student might type, "Tu udyo college madhe yenar ahes ka?" (Are you coming to college tomorrow?)
- Cognitive Conflict: By constantly using the English keyboard to type Marathi syntax, the brain associates English letters with Marathi grammar rules.
- The Switch-Gear Struggle: This habit makes it difficult for the brain to switch to formal structures when writing emails to lecturers or HR managers.

The Algorithm and the Vernacular Bubble

Social media algorithms are designed to show users content they are most comfortable with, which often traps rural or semi-urban students in a "vernacular bubble".

- Content Saturation: Feeds are often filled with local Marathi comedy, regional news, and vernacular influencers.
- Lack of Passive Listening: Unlike previous generations who absorbed English through news or movies, modern students lack exposure to the natural rhythm, vocabulary, and pronunciation of English.

"Minglish" - The Hybrid Trap

A prevalent phenomenon on polytechnic campuses is the heavy use of "Minglish," a seamless blending of Marathi grammar with English technical terms.

- Campus Example: A student might say, "Sir, maza program run hot nahiye, error dakhavtoy" (Sir, my program is not running, it is showing an error).
- The False Sense of Fluency: Because the student correctly uses technical terms like "program," "run," and "error," they feel they are communicating in English.
- The Structural Reality: The underlying foundation, verb placement and tense, remains strictly Marathi.
- The Interview Collapse: When the "Minglish" crutch is removed in a formal interview requiring pure English, the student's ability to communicate often collapses.

The Bleed of Texting Slang into Academic Writing

Casual digital communication habits frequently cross over into formal MSBTE academic work.

- Common Errors: Lecturers often find "bcoz" (because), "u" (you), and "ur" (your) in exam papers and micro-project reports.
- Lack of Formal Boundaries: This shows a significant blurring of the line between informal chatting and formal technical writing.

XI. THE INDUSTRY-ACADEMIA DIVIDE: MARKET REQUIREMENTS VS. INSTITUTIONAL APPROACH

To understand why Marathi MTI persists, we must look at the administrative disconnect between market demands and how technical colleges prioritize language education.

The Market Reality: Communication as a Core Competency

Engineering and manufacturing sectors in India are now deeply integrated with global supply chains.

- Beyond Technical Skills: Employers like Tata Motors or IT giants assume diploma holders have technical skills; instead, they test for articulation during placements.
- The MTI Penalty: Highly skilled students are often judged unfairly by recruiters—heavy L1 interference is frequently registered as a lack of intelligence or professionalism.
- Functional Needs: Technicians must be able to write shift reports and explain faults to managers who may not speak the local language.

The College Management Perspective

Despite market needs, many tier-2 and tier-3 polytechnic managements treat "English" as a secondary, non-core subject.

- Resource Allocation: Colleges invest heavily in computer labs and machinery, but often neglect language labs, leaving them with outdated software or using them only for documentation during accreditation.
- Prioritizing Technical Seminars: Guest lectures focus on core trends like AI or Auto-CAD, while seminars on professional English or overcoming MTI are rarely prioritized.
- The "Clearance" Subject: English is viewed merely as a paper that students need to pass with 35 marks to secure their diploma.

The MSBTE Exam Pattern Paradox

The current testing mechanism often fails to assess a student's true language capability.

- Teaching to the Test: Because the MSBTE theory exam is predictable, students treat English like a science subject, memorizing letter formats and essays by heart.
- Marks vs. Competence: A student can score high marks (e.g., 70/100) through rote learning but remain unable to speak three grammatically correct sentences in a viva-voce.
- The Structural Failure: The written exam does not test the spontaneous thinking required to overcome the Marathi SOV (Subject-Object-Verb) habit.

The Burden on the English Lecturer

The institutional apathy places an immense burden on the language department.

- Classroom Realities: Lecturers are often given classes of 60 to 80 students, most from rural Marathi-medium backgrounds.
- The Impossible Task: They are expected to undo 10 years of ingrained vernacular habits in a single semester using only a chalk and a blackboard.
- Unfair Blame: When students fail interviews due to poor communication, the blame is shifted to the English department, ignoring the systemic lack of support.

XII. INSTITUTIONAL UPGRADES TO BRIDGE THE GAP

To successfully increase campus placement statistics, addressing Mother Tongue Influence (MTI) must become a mission for the entire college rather than just the responsibility of the English teacher.

Shifting the Management Mindset

- College principals and Heads of Departments (HODs) must elevate Communication Skills to the same level of importance as core engineering subjects.
- Language training should not be treated as a one-time task for the first semester; it must be integrated into the second and third years through continuous technical presentation sessions.

Cross-Departmental Collaboration

The fight against Marathi MTI is most effective when technical lecturers join the effort.

- When a mechanical engineering lecturer demands that students explain lab practicals in standard English and refuses to accept "Minglish", students begin to realize that language is a professional tool rather than just an exam subject.

Harnessing Social Media for Education

Instead of fighting the use of smartphones, lecturers can modernize their assignments to align with student habits.

- Modernized Assignments: An English lecturer can assign a task where students record a 60-second video, similar to an Instagram Reel, explaining a technical concept in pure English, free of Marathi MTI.
- Digital Practice: Submitting these videos to the class WhatsApp group uses existing digital habits to practice spoken fluency and pronunciation in a familiar environment.

XIII. LIMITATIONS OF THE STUDY

Every research paper operates within specific boundaries, and it is important to understand the parameters of this study to ensure findings are applied correctly without being overly generalized.

Geographical and Linguistic Boundaries

While Maharashtra is a large state, this study generalizes "Standard Marathi".

- **Dialect Variations:** It does not deeply explore regional dialects such as Varhadi (Vidarbha), Ahirani (Khandesh), or Malvani (Konkan). These dialects have their own unique tones and vocabulary that could lead to different English errors.
- **Other Languages:** The findings cannot be directly applied to students in the same colleges whose mother tongue is Hindi, Gujarati, or Urdu.

Focus on Diploma-Level Technical Education

The research is specifically tailored to the MSBTE ecosystem.

- **Age Group:** It focuses on students aged 16 to 19 who enter polytechnic right after the 10th standard.
- **Limited Scope:** Because of this, the suggestions might not work for older students in B.E. or B.Tech programs.
- **Non-Technical Fields:** The strategies are also not intended for students in arts, commerce, or humanities, where technical vocabulary isn't as central.

The Socio-Economic Scope

The "silent classroom syndrome" and lack of English exposure discussed here mostly affect students from rural or economically modest backgrounds.

- **Urban Advantage:** Students in metropolitan hubs like Mumbai or Pune often encounter conversational English in malls, cinemas, and social circles.
- **Reduced Impact:** This "ambient exposure" often naturally reduces the Mother Tongue Influence, meaning students in big cities might not face the same level of structural errors as their rural counterparts.

XIV. SCOPE FOR FUTURE RESEARCH

Because language and technology are constantly evolving, the study of Mother Tongue Influence in technical education remains an ongoing process. This research establishes a foundation for several pathways that scholars and lecturers can explore to further support students.

The Role of Artificial Intelligence

The most immediate area for new study is the link between AI and regional language speakers.

- **Tool Usage:** Researchers could look at how polytechnic students use AI like ChatGPT, Grammarly, or pronunciation apps.
- **The Learning Question:** It is vital to find out if these tools help students actually learn the SVO (Subject-Verb-Object) structure or if they are just using AI to translate Marathi into English without understanding the rules.

Long-Term Studies on the MSBTE Syllabus

A "longitudinal study" would track a specific group of students over a long period to see real progress.

- **Tracking Progress:** Future researchers could follow a batch of Marathi-medium students from their first semester all the way to their sixth.
- **Measuring Success:** By comparing their speaking skills in year one to their interview performance in year three, we can scientifically measure how well the "Communication Skills" curriculum reduces MTI.

Comparing Multiple Indian Languages

Maharashtra's classrooms are becoming more diverse, which offers a unique research opportunity.

- **Cross-Language Analysis:** A study could compare the English errors made by Marathi L1 students against those made by Hindi or Telugu L1 students in the same engineering lab.
- **Customized Solutions:** This would help colleges build language labs that fix specific regional problems rather than using a general approach for everyone.

Impact of Regional Language Engineering Courses

Educational bodies like AICTE have recently introduced engineering diplomas and degrees taught entirely in regional languages, including Marathi.

- **Career Trajectories:** A key research topic would be tracking the careers of students who learn in Marathi versus those who learn in English.
- **The Job Barrier:** Researchers need to see if removing the English barrier leads to better technical understanding, and if it makes it harder to get jobs in multinational companies that only use English.

XV. CONCLUSION

This research proves that for a Marathi-speaking polytechnic student, learning English is not just about memorizing rules, it is a cognitive battle against deeply ingrained linguistic habits. The core struggle lies in the massive structural difference between the two languages, where students unconsciously apply the Marathi Subject-Object-Verb (SOV) pattern to English, leading to literal translations like "I the circuit diagram drawn". These errors, along with phonetic confusion over sounds like /v/ and /w/, create a "translation bottleneck" that slows down technical thought and often results in "Silent Classroom Syndrome," where students stay quiet despite having the correct engineering answers.

The situation is further complicated by a "vernacular digital bubble" and institutional neglect. Social media habits and the rise of "Minglish" offer a false sense of fluency that collapses during high-stakes corporate interviews. Meanwhile, many polytechnic colleges treat English merely as a "clearance subject" to be passed through rote learning, rather than a vital career tool. This creates a gap where technically brilliant students from rural backgrounds lose job opportunities simply because they cannot articulate their skills in a way that global industries require.

Ultimately, the path forward requires a shared effort to achieve "Global Intelligibility" rather than linguistic perfection. Lecturers must use localized strategies like contrastive analysis to demystify grammar, while students must take ownership by shifting their mental narration to English. When institutional management elevates communication to the same level as core engineering subjects, the language barrier begins to fade. By addressing these hurdles, we ensure that a student's technical talent can shine in any boardroom, unhindered by their regional linguistic background.

The objective of this research is not to erase a student's cultural identity or force a fake foreign accent upon them. Instead, the goal is "Global Intelligibility". By actively reducing Mother Tongue Influence, we can ensure that a brilliant student from a rural Marathi-medium school can stand confidently in a corporate boardroom, letting their talent shine without being blocked by a language barrier.

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The logo for IJRTI (International Journal for Research Trends and Innovation) is a large, light blue watermark in the background. It features a stylized lightbulb shape with a circular top and a semi-circular bottom. Inside the circle, the letters 'IJRTI' are written in a bold, white, sans-serif font. Below the circle, there are two horizontal bars and a semi-circle, suggesting the base of the lightbulb.

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