

CHAPTER-25

Discourse-oriented teaching and learning in secondary school mathematics: A theoretical framework

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ABSTRACT

This theoretical paper argues for a discourse-centred approach to mathematics teaching and learning at the secondary school level, with particular attention to its potential for enhancing conceptual understanding, meaningful student engagement, and equitable participation. Mathematical discourse encompasses the deliberate use of oral and written language, symbolic notation, visual representations, and other modes of communication through which mathematical ideas are developed, negotiated, and conveyed. In multilingual classrooms—a context explicitly addressed by India’s National Education Policy (NEP 2020) and the National Curriculum Framework (NCF 2023)—students’ home languages and mother tongues serve as indispensable cognitive and cultural tools that enable access to mathematical meaning.

Grounded in sociocultural learning theory, especially Vygotsky’s (1978) framework and Sfard’s (2008) communicational approach, this paper conceptualises discourse as a mediating bridge between the social dynamics of the mathematics classroom and individual cognitive development. Four categories of mathematical discourse are identified and examined: authoritative, dialogic, exploratory, and reflective. Each performs a distinctive pedagogical function in nurturing reasoning, argumentation, conceptual understanding, and the progressive acquisition of formal mathematical language, particularly in linguistically diverse secondary school settings.

The paper further examines how a discourse-focused, multilingual pedagogy—aligned with the goals of NEP 2020 and NCF 2023—supports higher-order thinking, strengthens mathematical reasoning, heightens learner engagement, and ensures inclusive participation by affirming diverse linguistic and cultural identities. Drawing on a review of relevant literature, the study provides a robust theoretical rationale for integrating discourse-oriented instructional practices that honour both the mother tongue and the medium of instruction in mathematics education. It concludes by advocating for the purposeful, systematic embedding of such approaches within secondary mathematics classrooms.

KEYWORDS: Discourse, Multilingualism, Mother Tongue, Mathematics Education, Pedagogy, Teaching–Learning Process, Secondary Education

1 Introduction

Walk into almost any secondary mathematics classroom and you will likely observe one dominant pattern: the teacher speaks, demonstrates, and evaluates, while students listen, copy, and practise. This arrangement, though deeply familiar, has come under sustained scrutiny from mathematics education researchers who argue that meaningful learning in the subject is fundamentally a communicative act. When students talk about mathematics—when they explain, question, debate, and reflect—they are not merely rehearsing content; they are constructing understanding. Discourse, in this sense, is not supplementary to mathematical learning; it is at the very heart of it.

Mathematical discourse refers broadly to the ways in which teachers and students communicate, reason, and interact around mathematical ideas within the classroom. It encompasses spoken dialogue, written expression, symbolic notation, visual representations, gestures, and every other mode of communication through which mathematical meaning is made and shared. A discourse-oriented approach to mathematics instruction deliberately positions communication as the primary vehicle for facilitating understanding, developing reasoning capacity, and deepening students' engagement with mathematical content.

At the secondary school level, this communicative dimension of learning takes on added importance. As students encounter increasingly abstract and formal mathematical ideas—from algebraic generalisation to geometric proof—the ability to articulate reasoning, interrogate assumptions, and engage in sustained mathematical argumentation becomes critical. The transition from elementary to secondary mathematics brings with it a corresponding shift in cognitive demand, one that is best navigated through structured, purposeful dialogue rather than passive reception.

This paper develops a theoretical framework for a discourse-oriented teaching and learning process in secondary mathematics. It examines the nature and significance of mathematical discourse, reviews the relevant research literature, establishes the theoretical foundations on which such an approach rests, and explores the practical implications for classroom teaching. Particular attention is paid to the multilingual realities of Indian classrooms and the opportunities these present for richer, more inclusive mathematical dialogue.

1.1 *Types of Mathematical Discourse*

Mathematical discourse takes several distinct forms, each of which serves a different purpose in the teaching and learning process. The four types discussed below—authoritative, dialogic, exploratory, and reflective—are not mutually exclusive; skilled teachers move fluidly between them in response to the demands of particular learning moments.

1.1.1 *Authoritative Discourse*

Authoritative discourse is teacher-directed. The teacher controls the flow of information, presents mathematical rules and procedures, and sets the expectations for how students will engage with the content. This is perhaps the most recognisable form of classroom discourse—the teacher explaining, for instance, the sequence of steps involved in solving a quadratic equation, or demonstrating the algorithm for finding the highest common factor of two numbers.

This mode of discourse is not without pedagogical value. When introducing a new concept, establishing a common procedural foundation, or ensuring that all students have access to a particular method, authoritative discourse provides the scaffolding students need. Its limitations, however, are equally real: when authoritative discourse predominates, students are positioned as passive recipients of mathematical knowledge rather than active participants in its construction. Over time, this can erode both confidence and curiosity.

1.1.2 Dialogic Discourse

Dialogic discourse shifts the balance of participation. Rather than directing the conversation toward a predetermined endpoint, the teacher opens it up, inviting students to contribute their own thinking, question one another's reasoning, and explore multiple approaches to a given problem. The characteristic move of dialogic discourse is the open-ended question: "How else might we approach this?", "What assumptions are we making?", or "Do you agree with that reasoning? Why or why not?"

When a teacher asks students to solve a system of equations and then invites them to compare graphical, substitution, and elimination methods, the ensuing conversation is dialogic. Students are articulating their thinking, evaluating alternatives, and refining their understanding through genuine exchange. This form of discourse is particularly powerful in developing the kind of flexible, critical mathematical thinking that secondary education demands.

1.1.3 Exploratory Discourse

Exploratory discourse is organised around inquiry. Students are presented with tasks that require them to investigate, conjecture, and discover—and the teacher's role is to guide that process through strategic questioning and carefully judged support, rather than to supply answers. The spirit of exploratory discourse is genuinely investigative: students are not moving toward a conclusion they already suspect, but genuinely wondering.

A geometry lesson in which students measure the interior angles of various triangles, observe what seems to be a consistent pattern, and begin to articulate a conjecture about angle sums exemplifies this mode of discourse. The teacher supports the process by asking, "What are you noticing? Does this hold for every triangle you try? How might you convince someone else that your conjecture is correct?" Exploratory discourse builds mathematical habits of mind—the disposition to notice, to generalise, and to verify—that are foundational to the discipline.

1.1.4 Reflective Discourse

Reflective discourse turns attention inward, asking students to think not only about the mathematics but also about their own learning processes. After working through a demanding problem, students might be invited to discuss the strategies they employed, the obstacles they encountered, and the decisions that proved most productive. Questions like "What did you try first? Why did that not work? What did you do differently the second time?" prompt this kind of metacognitive engagement.

Reflective discourse is particularly valuable in cultivating a growth orientation toward mathematics. When students learn to see difficulties as informative rather than definitive, and to regard mistakes as data about their current understanding rather than as evidence of failure, they become more resilient and more effective mathematical learners. In this sense, reflective discourse does not merely support learning—it shapes learners.

1.2 Need and Significance of the study

The case for a discourse-oriented approach to secondary mathematics education is, in part, a case against the default. Traditional mathematics classrooms in many settings—and this is no less true in India than elsewhere—are organised around procedural transmission and rote practice. Students learn to execute algorithms; they are rarely invited to understand why those algorithms work or how they connect to broader mathematical ideas. The result, too often, is a brittle, surface-level competence that does not transfer to unfamiliar contexts and that fails to sustain student engagement over time.

A discourse-oriented approach addresses this by redefining what it means to do mathematics in school. Rather than treating the subject as a body of fixed procedures to be memorised and applied, it positions mathematics as a set of reasoning practices to be developed, shared, and

refined through communication. There are several compelling reasons why this reorientation matters at the secondary level specifically.

First, discourse promotes deeper conceptual understanding. When students are required to explain their thinking—to put mathematical ideas into words, to justify their procedures, to respond to a classmate’s challenge—they engage with those ideas more thoroughly than when they simply execute a calculation. The act of articulation is itself an act of sense-making.

Second, active participation in classroom discourse enhances motivation and engagement. When students experience themselves as genuine contributors to a mathematical conversation, rather than passive receivers of instruction, their sense of ownership over their learning increases. Mathematics becomes something they do, rather than something that is done to them. Third, discourse builds the communication and reasoning skills that mathematics education ought to develop. The ability to construct a coherent mathematical argument, to identify a flaw in someone else’s reasoning, and to represent an idea in multiple ways are not peripheral skills—they are central to mathematical competence, and they are developed primarily through practice in substantive mathematical dialogue.

Fourth, a discourse-oriented classroom is a more equitable classroom. When students are encouraged to share their thinking in whatever language or representational mode is most natural to them, and when diverse approaches are valued rather than suppressed, the learning environment becomes genuinely inclusive. Students who might be marginalised in a transmission-oriented classroom—because they are slower to execute algorithms, or because they think in a different language—find a place in a discourse-oriented one.

Fifth, the diversity of prior knowledge and linguistic background that characterises many secondary classrooms is an asset in a discourse-rich environment. Different students bring different conceptual resources to a mathematical problem, and those differences, when surfaced through discussion, enrich everyone’s understanding.

1.3 Review of Literature

The theoretical and empirical case for discourse-oriented mathematics education has been built, brick by brick, over several decades of research. Several foundational contributions are particularly relevant to the framework developed in this paper.

Sfard’s (2008) communicational theory of mathematical learning offers one of the most provocative reframings of what it means to know mathematics. Rather than treating mathematical knowledge as a collection of mental objects to be acquired, Sfard argued that thinking itself is a form of communication, and that learning mathematics is best understood as the process of becoming fluent in a particular kind of discourse—one characterised by its own vocabulary, symbols, narrative structures, and standards of justification. This framing has significant implications for instruction: if learning mathematics is learning to participate in mathematical discourse, then classrooms must become places where that discourse genuinely occurs.

Vygotsky’s (1978) sociocultural theory provides the developmental scaffolding for this view. Vygotsky argued that cognitive development is fundamentally social in origin: higher mental functions emerge first in interaction between people, and are only subsequently internalised as individual capacities. Language, for Vygotsky, is not merely a vehicle for expressing pre-formed thoughts; it is the primary medium through which thinking occurs. In a discourse-oriented mathematics classroom, the dialogues between students and between students and teacher are not incidental to learning—they are the mechanism through which learning takes place.

Mercer and Sams (2006) provided empirical support for this theoretical position through research on the role of structured talk in mathematical problem-solving. Their findings

demonstrated that when students are explicitly taught how to use language for mathematical reasoning—how to propose, question, clarify, and build on ideas—their problem-solving performance improves measurably. This work is particularly significant because it suggests that mathematical discourse can be taught, not merely hoped for.

Cobb et al. (1993) drew attention to the role of classroom culture in shaping the character of mathematical learning. Through careful analysis of classroom interactions, they showed that the norms established in a mathematics classroom—what counts as an acceptable explanation, what kinds of questions are welcomed, how disagreement is handled—profoundly influence the nature of students' mathematical activity. A classroom culture that values reasoning and communication produces qualitatively different mathematical learning than one that values only correct answers.

Moschkovich (2002) extended this work to multilingual settings, demonstrating that students' home languages are resources for mathematical learning rather than obstacles to it. Her research showed that discourse practices which acknowledge and draw on students' full linguistic repertoire—allowing movement between languages, validating mathematical reasoning expressed in the home language—support rather than hinder the development of mathematical understanding. This finding is of particular relevance to Indian classrooms, where linguistic diversity is the norm.

1.4 Theoretical Framework

The theoretical framework presented here draws on four interrelated bodies of scholarship: sociocultural theory, constructivism, communicational approaches to learning, and situated learning theory. Together, these perspectives provide a coherent account of why discourse is central to mathematical learning and what conditions are necessary for productive mathematical discourse to occur.

1.4.1 Sociocultural Theory (Vygotsky, 1978)

Vygotsky's foundational insight—that learning is inherently social, that language mediates thought, and that the zone of proximal development is the space in which discourse scaffolds the emergence of new competence—underpins the entire framework. In a discourse-oriented mathematics classroom, the conversations between students and teacher, and among students themselves, are the scaffolding through which learners internalise mathematical concepts and reasoning processes that initially exist only in shared social space.

1.4.2 Constructivist Theory (Piaget, 1952)

Although Piaget's focus was on individual cognitive development rather than social interaction, his account of learning as an active process of construction—in which the learner assimilates new experiences into existing mental structures and accommodates those structures when they prove inadequate—is fully compatible with a discourse-oriented approach. When students engage in mathematical dialogue, they are not passively receiving information; they are actively constructing, testing, and revising their understanding. Discourse is the catalyst for this constructive process.

1.4.3 Communicational Approach (Sfard, 2008)

Sfard's communicational framework shifts the unit of analysis from individual mental states to patterns of discourse. Learning mathematics, on this account, is not primarily a matter of acquiring representations of abstract objects; it is a matter of becoming a competent participant in mathematical discourse—a discourse characterised by particular ways of using words, symbols, and visual representations, and by particular standards for what counts as a valid argument or a satisfactory explanation. This framework directs pedagogical attention toward the quality and character of classroom communication.

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1.4.4 Situated Learning Theory (Lave & Wenger, 1991)

Lave and Wenger's account of learning as participation in communities of practice provides a further dimension. Mathematical knowledge, on this view, is not a decontextualised set of skills and facts; it is inseparable from the practices and relationships through which it is produced and used. A discourse-oriented classroom is, in a meaningful sense, a community of mathematical practice: students are not merely learning about mathematics—they are, through their participation in genuine mathematical dialogue, becoming mathematical thinkers.

2 The Role of Classroom Interaction

Understanding discourse at a theoretical level is necessary but not sufficient. Equally important is an account of the specific interactional mechanisms through which productive mathematical discourse is generated and sustained in real classrooms.

2.1 Teacher Questioning

The questions teachers ask shape the discourse of the classroom more powerfully than almost any other instructional decision. Questions that call for single-word answers or the retrieval of memorised facts—“What is the formula for the area of a triangle?”—generate a fundamentally different kind of classroom talk than questions that require reasoning and explanation—“Why does that formula work? What would happen if we changed the base?” Questions of the latter kind invite students into genuine mathematical reasoning; they signal that the teacher is interested not just in answers but in thinking.

Cobb et al. (1997) documented this dynamic through a detailed analysis of first-grade mathematics lessons, identifying the teacher's use of reflective discourse—prompting students to objectify and discuss their own mathematical activity—as a key mechanism in the development of both specific mathematical concepts and a general orientation toward mathematical inquiry. They describe a useful instructional sequence: elicit student thinking, support its articulation, then extend it toward more general or formal mathematical understanding. This “elicit–support–extend” pattern is equally applicable in secondary classrooms.

2.2 Feedback and Scaffolding

Effective feedback in a discourse-oriented classroom does more than evaluate correctness. It models mathematical reasoning, illuminates the path from a student's current understanding to a more sophisticated one, and sustains the dialogue. When a student makes an error, the most productive response is often not correction but a question—one that invites the student to reconsider their reasoning, to notice a consequence they had not anticipated, or to compare their approach with an alternative. Scaffolding, in this context, means providing the temporary support—through strategic questions, partial representations, or carefully chosen examples—that enables students to do more than they could do alone.

2.3 Peer-to-Peer Discourse

Some of the most productive mathematical discourse occurs not between teacher and student but between students themselves. When students explain their reasoning to a peer, they must organise their thinking, anticipate questions, and find language adequate to the ideas they are trying to express. This process of verbalisation is cognitively demanding in precisely the ways that deepen understanding. Collaborative problem-solving, structured pair discussions, and group mathematical investigations all create conditions in which student-to-student discourse can flourish.

3 Sociocultural and Linguistic Considerations

In the multilingual classrooms that characterise so much of Indian secondary education, the linguistic dimension of discourse deserves particular attention. Research consistently shows

that students learn mathematics most effectively when they are able to think and communicate in the language most natural to them, at least in the early stages of engaging with a new concept. Forcing students to navigate unfamiliar conceptual territory exclusively in a language they are still acquiring creates a double cognitive burden that impedes rather than supports learning. A linguistically responsive approach to mathematical discourse allows students to explore ideas in their home language or mother tongue, then work toward expressing those ideas in the language of instruction. Far from being a concession to linguistic limitation, this approach recognises that mathematical understanding and linguistic competence develop in tandem and that the former need not wait upon the latter. When a student can articulate a mathematical idea in Telugu before rendering it in English, both the mathematical understanding and the linguistic competence are strengthened.

The use of culturally familiar contexts in mathematical discourse serves a related purpose. When examples and problems are drawn from students' lived experience—from practices of measurement, exchange, or design familiar in their communities—the relevance of mathematics becomes visible and immediate. This is not merely a motivational strategy; it is a recognition that mathematical knowledge is always embedded in human practices and that drawing on those practices is pedagogically legitimate.

3.1 *Strategies for Discourse-Oriented Teaching*

Translating a theoretical commitment to discourse-oriented teaching into actual classroom practice requires deliberate and specific instructional strategies. The following approaches have been identified in the research literature as particularly effective in fostering rich mathematical dialogue at the secondary level.

3.2 *Establishing Classroom Norms for Mathematical Discourse*

Productive mathematical discourse does not emerge spontaneously; it must be cultivated through the establishment of explicit classroom norms. These norms—which might include expectations such as “explain your reasoning, not just your answer,” “hear others out before responding,” and “challenging an idea is not the same as criticising a person”—create the social conditions under which genuine mathematical dialogue becomes possible. The most effective approach is to develop these norms collaboratively with students at the beginning of the year, so that they understand and own the expectations that govern their classroom community.

3.3 *Using Open-Ended and Higher-Order Questions*

Open-ended questions—those admitting multiple valid responses, requiring explanation and justification, or inviting exploration of alternative approaches—are the lifeblood of discourse-oriented instruction. Rather than asking “What is the solution?”, a discourse-oriented teacher asks “How did you arrive at that solution, and are there other ways you might have approached it?” or “What would change if this condition were different?”. These questions do not merely elicit responses; they generate conversations.

3.4 *Encouraging Multiple Solution Strategies*

One of the most powerful triggers for productive mathematical discourse is the existence of multiple valid approaches to the same problem. When different students in the same class have solved a problem in different ways, the comparison and discussion of those approaches becomes a rich source of mathematical insight. The teacher's role, in these moments, is to orchestrate the comparison in a way that illuminates the connections between approaches and deepens everyone's understanding of the underlying mathematics.

3.5 *Facilitating Small-Group and Pair Discussions*

Whole-class discussion is important, but it is not the only—or always the most productive—context for mathematical discourse. Small-group and pair discussions offer students the

opportunity to articulate their thinking in a lower-stakes setting, to hear and respond to the ideas of peers, and to develop their mathematical language before sharing with the full class. The teacher's role during these interactions is to listen, to prompt with questions, and to identify the ideas and approaches that are worth bringing back to the whole group.

3.6 Using Talk Moves

Talk moves—specific conversational strategies for facilitating dialogue—are among the most practically useful tools in a discourse-oriented teacher's repertoire. Revoicing (“So if I understand you correctly, you’re saying that...”) confirms a student's contribution while making it available to the whole class. Restating (“Can someone put that in their own words?”) checks for shared understanding. Pressing (“Can you say more about why you think that?”) deepens the analysis. Wait time—the deliberate pause after a question, before inviting a response—signals that thinking takes time and that thinking is expected.

3.7 Integrating Metacognitive Reflection

Regular opportunities for reflective discourse develop students' capacity to think about their own mathematical thinking. Brief reflective prompts at the end of a lesson—“What was the most challenging part of today's problem? What strategy proved most useful? What would you do differently next time?”—build the habit of metacognitive awareness that distinguishes expert mathematical thinkers from novices. Written reflections, learning logs, or structured pair discussions can all serve this purpose.

3.8 Structuring Peer Review

Peer review activities, in which students evaluate and respond to each other's mathematical work, create a context for substantive mathematical discourse. When students give feedback, they must engage carefully with someone else's reasoning; when they receive it, they must consider their work from an external perspective. Both processes deepen mathematical understanding. Structured peer review tools—checklists, guided response protocols, or discussion frameworks—help students engage productively with this kind of critical, collaborative discourse.

3.9 Incorporating Mathematical Debates

Structured mathematical debates—in which student groups argue for the merits of different solution methods, representations, or conjectures—are a particularly powerful form of discourse-oriented activity. In a debate about methods for solving quadratic equations, for instance, one group might advocate for factoring, another for completing the square, and a third for the quadratic formula. Students must not only understand their own method well enough to defend it; they must understand the alternatives well enough to engage critically with them. The result is a depth of mathematical understanding that single-method instruction rarely achieves.

3.10 Connecting Discourse to Real-World Contexts

Mathematical discourse becomes more meaningful, and more motivating, when it is anchored in problems that feel genuinely significant to students. Open-ended problems drawn from contexts students care about—data on their own school, local environmental issues, questions about patterns in everyday life—invite the kind of sustained engagement and genuine disagreement that productive discourse requires. In a statistics lesson, for instance, students might analyse local rainfall data and debate which statistical summary best captures what is happening—a conversation with real stakes and no single right answer.

3.11 Leveraging Technology

Digital tools can powerfully support discourse-oriented mathematics teaching. Interactive graphing applications enable students to generate and share representations, creating a concrete basis for discussion. Collaborative platforms allow students to pose questions, respond to one

another's conjectures, and build shared understanding outside the constraints of a single class period. In blended learning environments, technology extends the time and space available for mathematical discourse while providing teachers with a record of student thinking that can inform subsequent instruction.

3.12 Promoting Multilingual and Culturally Responsive Discourse

In multilingual classrooms, culturally responsive discourse practice means actively drawing on the linguistic and cultural resources students bring to school rather than treating those resources as irrelevant or as obstacles to overcome. Students should be encouraged to explore and articulate mathematical ideas in their home languages, to make connections between mathematical concepts and practices from their own communities, and to see that mathematical knowledge is not the exclusive property of any single cultural tradition. In the Indian context, where mathematics has deep roots in Sanskrit, Tamil, and other indigenous intellectual traditions, there is a particular richness available to teachers willing to draw on it.

3.13 Classroom Implications

The theoretical framework and instructional strategies described above have several practical implications for secondary mathematics classrooms, particularly in the Indian context addressed by NEP 2020 and NCF 2023.

Teachers who wish to implement a discourse-oriented approach will likely need to reconsider both the structure of their lessons and their own role within them. Moving from a transmission model to a discourse model requires not only different activities but a different stance—one in which the teacher functions less as the source of mathematical authority and more as the facilitator of mathematical inquiry. This is not a diminishment of the teacher's role; if anything, it is a more demanding and more intellectually engaging one.

Curricular materials will need to be selected or adapted to support discourse. Tasks that have a single correct answer and a single method are not well suited to generating productive dialogue; tasks that are open-ended, that admit multiple approaches, or that require students to make and justify decisions are far more fertile ground for discourse. The development and curation of such tasks is itself an important professional skill.

Assessment practices will also need to evolve. If discourse is a central mode of mathematical learning, then assessment must attend to students' capacity to communicate mathematical reasoning, not only to execute procedures. This might involve observation of classroom discussions, analysis of written explanations, or structured oral assessments in which students articulate and defend their thinking.

Finally, the professional development of teachers is a critical enabling condition. Discourse-oriented teaching requires skills—in questioning, in listening, in managing multiple simultaneous conversations, in recognising and amplifying productive student ideas—that are not automatically acquired and that are not typically the focus of pre-service mathematics teacher education. Sustained, collaborative professional learning communities, in which teachers observe one another's practice and reflect together on the challenges of facilitating mathematical discourse, are among the most effective vehicles for this kind of professional growth.

4 Conclusion

The argument advanced in this paper is not a novel one, but its implications remain underexplored in the Indian secondary mathematics context. Discourse is not a supplement to mathematics teaching; it is, at the deepest level, what mathematics teaching is. When students talk about mathematics—when they explain, question, challenge, and reflect—they are doing

what mathematicians do. They are not preparing to understand mathematics; they are understanding it.

The four forms of mathematical discourse identified here—authoritative, dialogic, exploratory, and reflective—each contribute something essential to this process. No single form is sufficient on its own; productive mathematics instruction requires all four, deployed with skill and intentionality in response to the specific demands of particular learning moments. The theoretical frameworks of Vygotsky, Sfard, Piaget, and Lave and Wenger provide a coherent account of why this is so.

In the multilingual, culturally diverse classrooms of Indian secondary schools, a discourse-oriented approach is not merely desirable—it is an educational imperative. NEP 2020 and NCF 2023 have articulated a vision of mathematics education that is conceptually rich, linguistically responsive, and genuinely inclusive. Realising that vision will require teachers who are skilled in facilitating mathematical discourse, schools that support the development of such skills, and a research community that continues to examine how discourse-oriented practices can be most effectively implemented in the Indian context.

Future research should attend particularly to the challenges of implementing discourse-oriented approaches in large, under-resourced classrooms; to the specific dynamics of multilingual mathematical discourse in Indian languages; and to the design of teacher education programmes that effectively develop the discourse facilitation skills this approach demands. The theoretical framework offered here is intended as a foundation for that ongoing work.

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