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FORMATIVE ASSESSMENT PRACTICES IN SECONDARY SCHOOLS: AN EXPLORATORY STUDY

BINAY KUJUR [1] | DR. BISWESWARISAHU [2]

[1] M.Ed. STUDENT (4THSEMESTER), DR. PARSHURAM MISHRA INSTITUTE OF ADVANCED STUDY IN EDUCATION, SAMBALPUR, ODISHA.

[2] ASSISTANT PROFESSOR, DR. PARSHURAM MISHRA INSTITUTE OF ADVANCED STUDY IN EDUCATION (DR.PMIASE), SAMBALPUR - 768001, ODISHA, INDIA.

ABSTRACT:

The present study explored formative assessment (FA) practices in government secondary schools under the Rourkela Municipal Corporation, Odisha, India, from the perspectives of both teachers and students. Guided by an interpretivist paradigm and employing an exploratory qualitative design, the study conducted semi-structured interviews with ten secondary school teachers and ten students selected through purposive sampling. Thematic analysis of interview data yielded ten themes from teachers (A1–A10) and five from students (B1–B5), addressing four objectives: FA practices as viewed by teachers; FA practices as viewed by students; benefits of FA; and challenges in implementation. Findings reveal that FA is actively and diversely practised through questioning, assignments, quizzes, projects, group discussions, peer assessment, and portfolios. Feedback emerged as the most universally valued component across all participants. Benefits include improved academic achievement, enhanced understanding, increased motivation, better teaching practices, and improved examination performance. Key challenges are time constraints, large class sizes, workload, and limited technology access. The study concludes that FA is a valued and effective educational practice in this context, and recommends professional development, technology integration, and policy reforms to strengthen its implementation.

KEYWORDS:

FORMATIVE ASSESSMENT, SECONDARY SCHOOLS, QUALITATIVE RESEARCH, THEMATIC ANALYSIS, TEACHER PERCEPTIONS, STUDENT PERCEPTIONS, FEEDBACK.

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1. INTRODUCTION

Assessment is a vital component of the teaching-learning process, serving not only to evaluate students' learning but also to guide and improve instruction. Traditionally, educational systems in India and across the world have relied heavily on summative assessment, which measures learning outcomes at the end of an instructional period through examinations and tests. Although summative assessment plays an important role in certification and accountability, it provides limited opportunities for teachers to identify students' learning needs during the learning process and to make timely instructional adjustments. This limitation has led to increasing recognition of formative assessment (FA) as a more learner-centred and continuous approach to assessment.

Formative assessment is an ongoing process of collecting evidence about students' learning, interpreting that evidence, and using it to provide timely feedback that supports learning improvement. Rather than functioning as a separate event, it is integrated into everyday classroom instruction and enables teachers to monitor students' progress while helping learners become active participants in their own learning. Black and Wiliam (1998), in their landmark review of more than 250 studies, identified formative assessment as one of the most effective classroom interventions for improving student achievement, particularly among low-achieving learners. Heritage (2010) further described formative assessment as an essential part of effective teaching, while Wiliam (2011) outlined five key strategies that underpin effective formative assessment: clarifying learning intentions, eliciting evidence of learning, providing meaningful feedback, promoting peer assessment, and encouraging student self-assessment.

The theoretical foundations of formative assessment are rooted in constructivist and social constructivist perspectives proposed by Piaget and Vygotsky (1978), which view learning as an active, collaborative, and socially mediated process. These ideas are further supported by the Assessment for Learning (AfL) framework (Black & Wiliam, 1998; Wiliam, 2011), which emphasises assessment as a means of enhancing learning rather than merely measuring it. Similarly, the theory of self-regulated learning (Nicol & Macfarlane-Dick, 2006) highlights the importance of feedback in enabling students to monitor, evaluate, and improve their own learning.

A substantial body of international research has demonstrated the educational value of formative assessment. Sadler (1989) identified feedback as the central mechanism through which students recognise the gap between their current and desired performance and take appropriate steps to improve. Hattie and Timperley (2007) showed that effective feedback is one of the strongest influences on student achievement when it clearly communicates learning goals, current progress, and future directions. Meta-analyses conducted by Kingston and Nash (2011) and more recently by Jones and Oh (2024) have consistently confirmed that formative assessment contributes positively to students' academic performance and predicts improved summative assessment outcomes.

Beyond academic achievement, formative assessment has been found to enhance students' motivation, engagement, confidence, and self-regulated learning (Stiggins, 2005; OECD, 2005; Nicol & Macfarlane-Dick, 2006; Panadero et al., 2016). It also supports teachers in making informed instructional decisions by providing continuous evidence of students' understanding and learning needs (Heritage, 2010; Schildkamp et al., 2020). Recent studies further indicate that formative assessment promotes collaborative and co-regulated learning environments, where teachers and students jointly monitor learning progress and share responsibility for improvement (Veugen et al., 2024).

Despite its well-established benefits, the implementation of formative assessment continues to face several practical challenges. Studies have consistently identified time constraints, large class sizes, insufficient professional training, and limited educational resources as major barriers to its effective practice (OECD, 2005; Young & Jackman, 2014; Van der Kleij et al., 2020). More recent research by Ismail and Osman (2024) highlights the need for greater technology integration and continuous professional development to strengthen formative assessment practices, while Yan and Boud (2022) advocate dialogic, student-centred feedback as a sustainable approach to improving learning.

In India, educational reforms have increasingly recognised the importance of formative assessment. The National Education Policy (NEP, 2020) advocates a shift from examination-oriented and rote-learning practices towards competency-based, continuous, and formative approaches to assessment. Empirical studies in the Indian context have reported that teachers commonly use projects, assignments, portfolios, and classroom activities as formative assessment strategies and generally hold positive attitudes towards their implementation (Sardar & Rout, 2024). Research on the Continuous and Comprehensive Evaluation (CCE) framework has similarly highlighted the potential of formative assessment to improve student participation and holistic development while also identifying challenges such as extensive documentation requirements and large class sizes.

Although the existing literature provides considerable evidence regarding the effectiveness of formative assessment, most Indian studies have focused primarily on quantitative approaches or have examined only teachers' perspectives. There is limited qualitative research that simultaneously explores the experiences and perceptions of both teachers and students, particularly in government secondary schools in Odisha. This gap is especially important because understanding the perspectives of both groups can provide a more comprehensive picture of how formative assessment is practised in real classroom settings.

Against this background, the present study explores formative assessment practices in government secondary schools under the Rourkela Municipal Corporation, Odisha, from the perspectives of both teachers and students. Guided by an interpretivist paradigm and employing an exploratory qualitative research design, the study seeks to understand the nature of formative assessment practices, their perceived benefits, and the challenges encountered in their implementation. By capturing the voices of both teachers and students, the study contributes context-specific evidence to the growing body of literature on formative assessment and offers practical implications for improving classroom assessment practices in Indian secondary education.

2. CONCEPTUAL FRAMEWORK

The conceptual framework of the present study posits that formative assessment practices — when deliberately implemented through diverse strategies, continuous monitoring, questioning, and feedback — generate a cycle of evidence-based improvement in both teaching and learning. The framework, grounded in Assessment for Learning theory (Black & Wiliam, 1998; Wiliam, 2011), constructivism (Piaget), social constructivism (Vygotsky, 1978), and self-regulated learning theory (Nicol & Macfarlane-Dick, 2006), may be represented as follows:

FA Practices (Diverse Strategies, Feedback, Monitoring)

↓

Continuous Evidence of Learning (Strengths, Weaknesses, Gaps)

↓

Timely Feedback and Instructional Adjustment

↓

Enhanced Student Learning, Engagement, and Academic Achievement

This framework assumes that the quality of FA practice determines the quality of the evidence gathered, which in turn determines the quality of the instructional response. When FA is continuous, diverse, and feedback-rich, the cycle produces cumulative and measurable improvements in student learning outcomes. The framework guided the design of the interview schedules, the organisation of findings under four objectives, and the interpretation of themes in Section 4.

3. STATEMENT OF THE PROBLEM

Despite the growing recognition of formative assessment as a cornerstone of effective pedagogy affirmed by international research (Black & Wiliam, 1998; OECD, 2005; Wiliam, 2011) and India's National Education Policy (2020) there is a significant absence of qualitative evidence documenting how FA is actually practised, perceived, and experienced in government secondary schools in Odisha. Existing Indian studies have primarily adopted quantitative approaches, focused exclusively on teacher perspectives, or examined FA within the formal CCE framework without capturing the organic, day-to-day reality of assessment practice. No prior study has simultaneously explored both teacher and student perspectives on FA in government secondary schools under the Rourkela Municipal Corporation.

The present study therefore addresses the following problem:

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Specifically, the study sought to explore: (1) FA practices as viewed by teachers; (2) FA practices as viewed by students; (3) the benefits of FA; and (4) the challenges in implementing FA in government secondary schools under the Rourkela Municipal Corporation, Odisha.

OBJECTIVES OF THE STUDY

The following objectives were formulated to guide the present study:

1. To explore formative assessment practices in secondary schools as viewed by teachers.

2. To explore formative assessment practices in secondary schools as viewed by students.

3. To explore the benefits of formative assessment practices in secondary schools.

4. To explore the challenges in implementing formative assessment practices in secondary schools.

RESEARCH QUESTIONS

The following research questions were addressed:

1. How do teachers perceive and practise formative assessment in secondary schools?

2. How do students perceive and experience formative assessment in secondary schools?

3. What are the perceived benefits of formative assessment practices for teachers and students?

4. What challenges are encountered in implementing formative assessment practices?

OPERATIONAL DEFINITIONS OF VARIABLES USED IN THE STUDY

- **Assessment:** Assessment refers to the systematic and ongoing process of collecting, analysing, and interpreting evidence about students' knowledge, skills, and understanding for the purpose of improving teaching and learning.
- **Formative Assessment:** Formative assessment refers to the continuous, embedded process of gathering evidence about student learning during instruction and using that evidence — through feedback, questioning, and instructional adjustment — to support and improve learning. It encompasses all classroom activities intended to provide information about students' progress and to guide subsequent teaching decisions.
- **Secondary School:** Secondary school refers to educational institutions imparting education at the secondary level (Classes IX and X) under the Rourkela Municipal Corporation, Odisha.
- **Feedback:** Feedback refers to information communicated by the teacher (or peers) to students regarding their performance, understanding, or strategies, with the intention of helping them identify strengths, recognise errors, and improve their future learning and performance.
- **Student Engagement:** Student engagement refers to the degree of active participation, interest, motivation, and investment demonstrated by students in classroom learning activities and assessment tasks.
- **Thematic Analysis:** Thematic analysis refers to a qualitative data analysis method involving the systematic identification, organisation, and interpretation of recurring patterns (themes) within interview data.

DELIMITATIONS OF THE STUDY

The study is limited to government secondary schools under the Rourkela Municipal Corporation, Odisha.

The sample includes only ten teachers and ten students.

The study is confined to formative assessment practices at the secondary school level.

The study employed a qualitative approach; quantitative generalisation is not intended.

Social desirability bias may have influenced participants' responses during interviews.

3. METHODOLOGY

3.1 RESEARCH DESIGN

The study employed an Exploratory Qualitative Research Design. An exploratory design is appropriate when a researcher aims to investigate a phenomenon that has not been extensively studied in a particular context and seeks to generate themes and insights from participants'

perspectives rather than to test pre-specified hypotheses.

3.2 POPULATION AND SAMPLE

The study was conducted in two different government secondary schools (Classes IX and X) under the Rourkela Municipal Corporation, Odisha. Purposive sampling was used to select twenty participants: ten teachers (T1–T10) with experience ranging from 2 to 16 years across subjects including Hindi, English, Mathematics, Science, Social Science, Sanskrit, and Odia; and ten students (S1–S10), five from Class IX and five from Class X approximately, representing diverse socio-economic backgrounds.

3.3 DATA COLLECTION

Primary data were collected through individually administered semi-structured interviews using two separately designed interview schedules one for teachers and one for students from two different schools five teachers and students from each. The teacher schedule addressed FA strategies used, frequency, feedback practices, benefits, challenges, and suggestions. The student schedule addressed FA experiences, feedback received, benefits for learning and examination preparation, challenges, and suggestions. Both schedules were reviewed by subject matter experts and pilot-tested with two teachers and two students (excluded from the main sample) before finalisation.

3.4 DATA ANALYSIS

Interview data were analysed using thematic analysis following the six-stage framework of Braun and Clarke (2006): familiarisation with data; generating initial codes; searching for themes; reviewing themes; defining and naming themes; and writing up. Trustworthiness was established through prolonged engagement, member verification of selected transcripts, direct participant quotations as evidence for all themes, and transparent documentation of the analytical process (Lincoln & Guba, 1985). Ethical clearance was obtained; all participants provided informed consent and were guaranteed anonymity through participant codes.

4. FINDINGS AND DISCUSSION

Thematic analysis yielded fifteen themes ten from teacher interviews (A1–A10) and five from student interviews (B1–B5) organised under the study's four objectives. The themes are presented below with structured tables summarising key findings, representative quotations, and codes. Full extended analysis is available in the parent dissertation.

OBJECTIVE 1: FA PRACTICES AS VIEWED BY TEACHERS (THEMES A1–A4)

THEME A1: DIVERSE USE OF FA STRATEGIES

Category	Content
Key Findings	All ten teachers reported using multiple FA methods simultaneously. Strategies included questioning, quizzes, assignments, projects, group discussions, peer assessment, portfolios, concept maps, presentations, and classroom observations. T2 used the widest range; T1 and T7–T10 used questioning, assignments, and portfolios consistently.
Sample answers by teachers	*T2: 'I use quizzes, projects, and group discussions to assess my students.' T6: 'I give assignments and maintain portfolios to track student progress.'*
Codes	Questioning; Quizzes; Assignments; Projects; Group Discussions; Peer Assessment; Portfolios; Concept Maps; Presentations; Classroom Observations

THEME A2: REGULAR AND CONTINUOUS ASSESSMENT

Category	Content
Key Findings	Teachers reported varied but consistently regular assessment frequencies: daily (T2, T4), weekly (T5), topic-wise (T7–T10), monthly (T3), and via the government-mandated four formal FA events per year (T1). T6 combined all three — daily discussions, weekly quizzes, and topic-wise assignments — representing the most comprehensive approach.
Sample answers by teachers	*T6: 'I use daily discussions, weekly quizzes, and topic-wise assignments to keep track of student progress.' T7: 'After completing each topic, I check whether students have understood before moving forward.'*
Codes	Daily Assessment; Weekly Quizzes; Topic-wise Assessment; Monthly Assessment; Formal FA Schedule (FA-I to FA-IV); Continuous Monitoring

THEME A3: IMPORTANCE OF QUESTIONING AND FEEDBACK

Category	Content
Key Findings	All ten teachers confirmed questioning and feedback as core FA components. T2 and T4 used open-ended questions; T6 used oral and follow-up questions. Feedback modalities included verbal comments (all teachers), written remarks (T5, T6), and grade-based feedback (T1). Immediate feedback during class was emphasised by T6 and T8.
Sample answers by teachers	*T2: 'Feedback helps students understand their mistakes and improve their work.' T5: 'Questioning allows me to know whether students have understood the concept before I move on.'*
Codes	Open-ended Questions; Oral Questioning; Follow-up Questions; Verbal Feedback; Written Feedback; Grade-based Feedback; Immediate Feedback

THEME A4: STUDENT-CENTRED ASSESSMENT PRACTICES

Category	Content
Key Findings	Teachers described encouraging participation, collaborative learning, and individual focus. T1 focused on each student during teaching; T4 and T5 used active participation and task review; T6 used participatory observation and follow-up questioning; T7–T10 used TLMs and diagnostic questions to identify where students struggled.
Sample answers by teachers	*T4: 'I encourage students to work in groups and discuss their ideas.' T10: 'I use TLMs and questions to find out where students have difficulty.'*
Codes	Student Participation; Collaborative Learning; Group Activities; Active Learning; Classroom Observation; Diagnostic Assessment; TLM Use

OBJECTIVE 2: FA PRACTICES AS VIEWED BY STUDENTS (THEME B1)

THEME B1: REGULAR USE OF DIVERSE FA PRACTICES

Category	Content
Key Findings	All ten students confirmed the regular and diverse use of FA methods in their classrooms: quizzes, questioning, assignments, projects, group discussions, peer assessment, rubrics, and portfolios. Frequencies ranged from daily (S1–S4, S8–S10) to weekly (S5) to post-topic (S6). Four formal FA events per year were reported by several student's alongside informal daily practice.

Sample answers by teachers	*S1: 'Our teacher gives quizzes and assignments every week and uses group discussions.' S8: 'We use portfolios and the teacher asks questions every day to check our understanding.'*
Codes	Quizzes; Questioning; Assignments; Projects; Group Discussions; Peer Assessment; Rubrics; Portfolios; Unit Tests; Formal FAs

OBJECTIVE 3: BENEFITS OF FA PRACTICES (THEMES A5–A7, A10, B2–B3)

THEME A5: BENEFITS FOR STUDENT LEARNING

Category	Content
Key Findings	All ten teachers reported clear benefits. T2 noted that FA identifies strengths and weaknesses and reduces fear of failure. T5 reported improved understanding, confidence building, and active participation. T7–T10 specifically observed that slow learners became more interested and active — a key equity finding.
Sample answers by teachers	*T5: 'It improves understanding, builds confidence, and promotes active learning.' T7: 'Even my slow learners have become more interested and active in class since I started doing regular assessment.'*
Codes	Better Understanding; Confidence Building; Active Participation; Reduced Fear of Failure; Benefits for Slow Learners

THEME A6: IMPROVEMENT IN TEACHING PRACTICES

Category	Content
Key Findings	All ten teachers confirmed that FA data directly improves their instruction. T2 uses assessment evidence to plan lessons and revisit difficult concepts. T5 refines teaching strategies based on student needs. T6 adjusts teaching methods after identifying learning gaps. T7–T10 modified lessons based on questioning outcomes.
Sample answers by teachers	*T6: 'Formative assessment helps me improve my teaching by identifying students' learning gaps and adjusting my teaching methods accordingly.'*
Codes	Lesson Planning; Teaching Modification; Identifying Learning Gaps; Instructional Adjustment; Responsive Teaching; Evidence-based Teaching

THEME A7: POSITIVE STUDENT RESPONSE AND PARTICIPATION

Category	Content
Key Findings	All ten teachers observed broadly positive student responses. T3 noted students engage with FA playfully. T5 reported visibly increased interest. T7 observed that slow learners now participate actively. T1 noted that students who engage regularly in FA perform better in examinations.
Sample answers by teachers	*T3: 'Students engage with the activities playfully — they don't see it as an exam, they enjoy it.' T7: 'My slow learners have become more interested in class. They participate now where before they would sit quietly.'*
Codes	Active Participation; Positive Response; Increased Motivation; Reduced Anxiety; Slow Learner Improvement; Enjoyment

THEME A10: IMPROVEMENT IN STUDENT PERFORMANCE OVER TIME

Category	Content
Key Findings	Teachers consistently observed gradual but clear improvement in student performance attributable to sustained FA. T1 noted improved reading and writing capacity. T5 reported noticeable and measurable performance improvement. T7–T10 acknowledged gradual improvement: 'It will take time but improvement is sure.'
Sample answers by teachers	*T5: 'Students show noticeable improvement in their overall performance when I consistently use formative assessment.' T7: 'It will take time but the improvement is sure.'*
Codes	Performance Improvement; Gradual Progress; Long-term Benefits; Improved Consistency; Measurable Growth

THEME B2: FA ENHANCES LEARNING AND UNDERSTANDING

Category	Content
Key Findings	All ten students reported that FA makes learning more interesting and deepens understanding. S2 described how classroom questioning combined with home study creates superior understanding. S4 valued repeated teacher explanation until all students understand. S6, S8, and S9 highlighted smart classes and educational videos as powerful FA supports.
Sample answers by students	*S4: 'Sir makes us understand again and again until we all understand — nobody is left behind.' S6: 'Smart classes and videos make understanding much clearer than just reading from the book.'*
Codes	Better Understanding; Interesting Learning; Clarification of Doubts; Practice Opportunities; Smart Class Learning; Video-based Learning; Consolidation

THEME B3: FEEDBACK SUPPORTS LEARNING AND EXAMINATION PREPARATION

Category	Content
Key Findings	All ten students confirmed that teacher feedback helps them identify mistakes, improve work, and prepare for examinations. All ten reported that feedback improves overall learning. S10 expressed eagerness to be corrected. S2 found that home study combined with classroom questioning creates deep understanding and examination readiness.
Sample answers by students	*S10: 'Yes, I am eager to be corrected by my teacher because it helps me do better.' S2: 'When I study at home and then discuss in class with questions, I understand deeply and feel ready for the exam.'*
Codes	Teacher Feedback; Error Identification; Learning Improvement; Examination Readiness; Confidence Building; Mastery Learning

OBJECTIVE 4: CHALLENGES IN FA IMPLEMENTATION (THEMES A8–A9, B4–B5)

THEME A8: CHALLENGES IN IMPLEMENTATION

Category	Content
Key Findings	Nine of ten teachers reported practical challenges. Time constraints were most widely cited (T2–T6, T9, T10). Large class sizes limited individual attention (T6–T10). T8 stated: 'It costs a lot of time. Large class size is also a big problem.' T9 described FA as 'time-consuming.' T1 alone reported no significant difficulties.
Sample Quote	*T8: 'It costs a lot of time. Large class size is also a big problem — you cannot give attention to every student.' T4: 'Managing time for assessment while completing the syllabus is difficult but we try our best.'*
Codes	Time Constraints; Large Class Size; Workload; Individual Attention; Curriculum Coverage Pressure

THEME A9: NEED FOR SUPPORT, RESOURCES, AND IMPROVEMENT

Category	Content
Key Findings	Teachers identified clear needs: digital assessment platforms (T2), regular in-service training (T4, T5), reduced administrative workload (T5), institutional support (T6–T10), and study tours for professional exposure (T1). Notably, T6, T7, T8, and T10 recommended reducing mandatory formal FAs from four to two per year to allow more genuine formative practice.

Sample Quote	*T5: 'Provide regular training to teachers, reduce workload, and encourage continuous feedback systems.' T7: 'We do four formal FAs in a year — two would be better so we have more time for real teaching and assessment.'*
Codes	Teacher Training; Digital Assessment Tools; Staff Support; Technology Integration; Reduced Workload; Professional Development

THEME B4: MINOR CHALLENGES EXPERIENCED BY STUDENTS

Category	Content
Key Findings	A minority reported minor issues: S1 felt occasionally overloaded by activity volume; S7 felt nervous when assessments were announced suddenly and found repetitive activities tiring; S6 experienced discomfort when unable to answer. Importantly, seven students reported no difficulties, nine reported no stress, and eight reported adequate time for FA tasks.
Sample answers by students	*S7: 'Sometimes when the teacher suddenly announces an assessment without telling us before, I feel nervous.' S1: 'Sometimes the number of activities is a lot.'*
Codes	Activity Overload; Nervousness; Repetitive Activities; Minor Time Pressure

THEME B5: STUDENTS RECOMMEND TECHNOLOGY AND SUPPORT

Category	Content
Key Findings	Students offered constructive suggestions: S6 recommended maps and smart classes; S7 proposed weekly quiz competitions, short revision notes, and extra support classes; S8 and S9 requested more educational videos and photos. The majority (S2, S3, S4, S5, S10) expressed high satisfaction and recommended continuation of current practices.
Sample answers by students	*S7: 'Teachers should make short notes, take weekly group discussions, and take extra classes for those who don't understand.' S8: 'I learn better when the teacher uses videos and photos to explain things.'*
Codes	Smart Classes; Educational Videos; Weekly Quizzes; Short Revision Notes; Extra Support Classes; Group Discussions

5. DISCUSSION

The findings of the present study resonate strongly with the international and Indian literature on formative assessment. The diversity of FA strategies reported by both teachers and students questioning, feedback, quizzes, projects, portfolios, peer assessment directly reflects the multi-strategy model advocated by Wiliam (2011) and the assessment diversity highlighted by Abd Halim et al. (2024). The universality of continuous, regular assessment across participants confirms Heritage's (2010) conceptualisation of FA as an integral, not peripheral, dimension of classroom teaching.

Feedback's emergence as the single most consistently valued FA component across all fifteen themes is one of the most robust findings of this study. This aligns precisely with Sadler's (1989) foundational theory and Hattie and Timperley's (2007) meta-analytic evidence, and reinforces the centrality of feedback as the mechanism through which assessment becomes genuinely formative. The finding that all ten students actively valued and eagerly sought teacher feedback and explicitly connected it to improved examination performance corresponds with Jones and Oh's (2024) demonstration of the strong predictive relationship between FA performance and summative assessment outcomes.

The equity dimension of the findings deserves particular attention. Multiple teachers specifically noted improved engagement, participation, and motivation among slow learners as a result of regular FA a finding consistent with Black and Wiliam's (1998) evidence that FA produces disproportionately large gains for lower-achieving learners. In the context of government secondary schools serving predominantly economically marginalised and first-generation learners in Odisha, this equity benefit of FA has profound practical significance.

Students' enthusiasm for smart classes and educational videos as FA support tools reflects the technology integration priorities identified by Ismail and Osman (2024) and Veugen et al. (2024), and signals a readiness for technology-enhanced FA among secondary students that is not yet matched by infrastructure availability in many government schools.

The dominant challenges time constraints, large class sizes, workload, and limited professional development are consistent across international studies (Young & Jackman, 2014; OECD, 2005; Van der Kleij et al., 2020) and Indian CCE research, confirming the universality of structural barriers to FA implementation. Teachers' specific recommendation to reduce mandatory formal FA events from four to two per year reflects a well-grounded practitioner insight: that excessive formalisation of FA can paradoxically undermine the genuine, flexible, and responsive practice that makes FA effective. This finding has important policy implications for educational authorities in Odisha.

6. CONCLUSION

The present study explored formative assessment practices in government secondary schools under the Rourkela Municipal Corporation, Odisha, using an exploratory qualitative approach with dual teacher-student perspectives. Fifteen themes emerging from thematic analysis of twenty semi-structured interviews provide a comprehensive, evidence-grounded account of FA as it is lived in these classrooms.

The study concludes that FA is actively, regularly, and diversely practised in the schools studied. Feedback, continuous monitoring, multi-method assessment strategies, and student-centred practices characterise the FA culture documented here. Both teachers and students hold strongly positive perceptions of FA, and its benefits for student understanding, confidence, engagement, equity, teaching quality, and examination performance are consistently affirmed across participant groups.

Structural barriers including time constraints and large class sizes constrain but do not negate FA's positive impact. What is needed and what teachers clearly articulate is institutional support: professional development, technology access, reduced administrative burden, and policy reforms that reduce the number of

mandatory formal FA events to allow space for genuine formative practice.

The study contributes to the literature by providing a rare dual-perspective qualitative account of FA in Indian government secondary education, situating findings within a specific and under-researched Odishan context, and demonstrating that formative assessment when supported is already making a meaningful difference in the classrooms of Rourkela's government secondary schools.

7. EDUCATIONAL IMPLICATIONS

FOR TEACHERS

- Expand the repertoire of FA strategies, particularly self-assessment and peer assessment, to develop students' metacognitive skills.
- Provide regular, specific, timely, and forward-looking feedback that guides improvement, not merely error correction.
- Use FA evidence systematically to modify instructional plans, making teaching more responsive to students' actual needs.

FOR SCHOOL ADMINISTRATORS

- Advocate for reduced class sizes and streamlined documentation to enable teachers to implement FA meaningfully.
- Invest in technology infrastructure smart classrooms, digital assessment platforms, and connectivity to enable technology-enhanced FA.
- Support regular professional development workshops and collaborative learning communities focused on FA strategies.

FOR POLICY MAKERS

- Consider reducing mandatory formal FA events from four to two per year in government secondary schools to create space for genuine formative practice.
- Align professional development investment with NEP 2020's commitment to continuous, competency-based assessment.

Develop context-specific FA guidelines and exemplar materials for government secondary schools in Odisha.

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