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Review

# From Examination Stress to Classroom Success: Formative Assessment for Secondary Student Motivation in Sri Lanka's 2026 Education Reforms: A Self-Determination Theory Perspective

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## Abstract

The 2026 education reforms in Sri Lanka require a paradigm change towards competency-based formative assessment (FA) as opposed to summative assessment which is examination-based. But policy documents are not built into a solid pedagogical structure that can support this transition, and would be at risk of implementing it superficially. This review conceptualizes recent empirical developments (2024-2026) in Self-Determination Theory (SDT) and research in the field of formative assessment to fill this gap. Three major contributions are presented by us. First, by combining a dual process SDT model, we posit that the motivational power of FA is not only based on the support of autonomy, competence and relatedness, as well as the active prevention of controlling, chaotic, or rejecting teaching behaviors, a difference that has far reaching implications of intervention design. Second, we generalize findings of recent intervention studies that SDT-congruent FA practices are strongly associated with better learner attitudes and achievement, but with mediators of teacher assessment literacy. Third, we situate our findings in the specific implementation context of Sri Lanka consisting of large classes, resource inequality and an established exam culture to suggest a context-sensitive, tiered implementation plan and a research agenda in the future. We are able to conclude that to make the 2026 reforms deliver on its transformative potential, FA needs to be applied not as a peripheral method but as an overhaul of pedagogy, which is based on the principles of SDT and grounded in ongoing and practice-based professional development grounded in teacher assessment literacy.

**Keywords:** self-determination theory; formative assessment; assessment literacy; education reform; secondary education; Sri Lanka; motivation; need support

## 1. Introduction

### 1.1. Examine the Crisis in the Sri Lankan Secondary School Education

The literacy rate has also been reported to be high in Sri Lanka and the primary to tertiary education is also free. At that, there is one issue which is the fact that these achievements are compromised with a continuous crisis in secondary school. The national examinations always show that those students that pass the General Certificate of Education (G.C.E.) Ordinary Level (O/L) examinations find it difficult to transfer knowledge into new situations or pursue self-directed learning. The issue is well-established within the framework of education which gives significant emphasis on the examination-based measurement that promotes memorization as a type of learning, rather than critical thinking and problem solving (Ministry of Education, Sri Lanka, 2024).

According to the experts of the educational field, the current system is expensive to the family and creates shallow learning in which students merely study to pass exams only to forget them later

(Black & Wiliam, 2009). This can be seen in mathematics, science, learning a language, and history where a wide gap is seen between the success of students in exams and the real-life ability to solve problem or think in a higher order (Vijayakumaran, Chandrasena, and Liyanage, 2023). Such a culture of exams brings about the stress and disconnection culture where students tend to counter this by asking, will this be on the test? - and actually tune out when the answer is no.

### *1.2. Education Reforms of 2026: Turning a New Page*

The Sri Lankan government, through its Prime Minister, Dr. Harini Amarasuriya, has reacted to this crisis by introducing a radical scheme of reform, known as Transform Education: Transform Sri Lanka, which will be done starting January 2026, starting with Grades 1 and 6. These reforms represent the most radical attempts to reform the education system in decades and are meant to address the flaws of the current system, which is based on exams (Ministry of Education, Sri Lanka, 2025).

The reform framework has five key pillars which include modernization of the curriculum, teacher development, infrastructure and administrative reform, public awareness and most importantly assessment reform. The most significant change is the shift toward reliance upon summative and examination-based assessment up to competency-based and school-based formative assessments (FAs). The new system will pay more attention to the ongoing learning process, skills practice, creativity, and teamwork and make it more significant to the assessment process which will become more closer to international standards (Ministry of Education, Sri Lanka, 2024). However, there is a significant gap in the frame of applying the changes to the pedagogical level despite the fact that the structural changes are properly stated. The lack of a clear pedagogical and psychological system of the formative assessment creates the threat of the failure of the actual change in the classroom.

### *1.3. Reason Pedagogical Framework Is Needed: The Association Between Formative Assessment and Motivation*

Taking into account this gap, this review states that formative assessment (FA) as a program founded on the Self-Determination Theory (SDT) can be used to address the motivational crisis in the Sri Lankan secondary classrooms. The theory invented by Deci and Ryan (2000) under the name SDT, theorizes the autonomy, competence, and relatedness as the most important psychological needs to stimulate intrinsic motivation. When such needs are met, then the students would be likely to engage in the learning process and promote motivation and learning.

This review is informed by the synthesis of the evidence of SDT and FA research particularly the quasi-experimental research by Zhang et al. (2025) to demonstrate how FA could be used to address the psychological needs of the secondary students in Sri Lanka. It claims that effective realization of FA needs a change in classroom culture a culture that encourages intrinsic motivation and learning as a process and not a result as determined by standardized tests.

### *1.4. Conceptual Framework: The Sri Lankan Education System Needs Formative Assessment*

The theoretical framework applied in this review is the combination of Self-Determination Theory (SDT) and Formative Assessment (FA) to reach the elimination of the motivation crisis in the Sri Lankan secondary education. The three fundamental psychological needs of autonomy, competence and relatedness as postulated by SDT can be met by the practice of FA, which ultimately leads to increased motivation and performance of students in the learning process (see Appendix). The needs are quite in line with the overall objectives of the 2026 education reforms in Sri Lanka because it is meant to substitute examination-based assessment with enhanced learning, togetherness, and student ownership.

### 1.5. Objective and Methodology of the Review

The key aims of the review are to: (1) synthesize evidence about the use of SDT and FA studies, in particular, Zhang et al. (2025), on the impact of formative assessment on student motivation and student achievement; (2) extrapolate these findings on the 2026 education reform framework in Sri Lanka and formulate the opportunities and challenges; (3) propose a contextualized model of the implementation

### 1.6. Theoretical Foundations: Self-Determination Theory

The Self-Determination Theory (SDT) as explained by Deci and Ryan (2000) is based on the premise that the most effective motivation and involvement are realized where three basic psychological needs are met namely, autonomy, competence and relatedness. These needs are determined in the educational context in the following manner: autonomy- the desire to feel volition, to be capable of making decisions and the capacity to regulate deeds; competence- the need to feel good and competent in learning; and relatedness- the need to feel related with other individuals, peers, and teachers. The needs have been shown to be paramount in fostering intrinsic motivation and interest towards the achievement of better academic performance (Niemiec and Ryan, 2009). Formative assessment can be utilized to fulfill these needs when these principles are applied to shift the focus on the testing and ranking to the continuous and personal learning experience.

## 2. Literature Review Formative Assessment and Student Motivation

### 2.1. Defining Formative Assessment

Formative assessment (FA) refers to a collection of instructional strategies applied to acquire information regarding student learning to make subsequent instructional and learning judgments (Black and Wiliam, 2009). Formative assessments are incorporated into learning as opposed to summative ones that are administered at the end of a unit or a course to determine what has been learned. Some of the fundamental FA practices are goal-setting, questioning, self-assessment and peer-assessment, reflection and feedback (Black and Wiliam, 2009).

### 2.2. Zhang et al. (2025): Key Findings

The article by Zhang et al. (2025) was a quasi-experimental study that took place in a Chinese middle school to investigate the impact of FA on the motivation and achievement of students using the SDT framework. The participants of the study were 89 middle school pupils who were randomly divided into FA intervention group and traditional teaching group. The main findings were: (1) FA had the strongest impact on relatedness with a huge effect size (partial  $\eta^2 = 0.298$ ,  $p < 0.001$ ); (2) autonomy had the best predictive ability of academic achievement in FA group but not in the control group; (3) the effects of competence were not significant ( $p = 0.001$ ); and (4) the motivation had

### 2.3. Evidence of the Support, by the Evidence of Other Contexts

The results of Zhang et al. (2025) are in line with the increasing amount of research. Pat-El et al. (2024) showed that students who have a favorable perception of formative assessment are more motivated. De Jonge et al. (2025) discovered that feedback and clarifying the goals prior to low-stakes tests decrease the anxiety associated with the tests. Yilmaz Soylu et al. (2025) stated that gamified formative assessment has shown a significant effect of enhancing the student motivation by all three SDT pathways. Indeed, Vijayakumaran et al. (2023) demonstrated that SDT principles implemented in secondary physics classes in Sri Lanka enhanced the performance of students and teacher satisfaction. Aust et al. (2024) have discovered that formative assessment had a positive impact on intrinsic motivation in mathematics in primary schools.

#### 2.4. Theoretical Framework Development: The Dual-Process Model of Need Support and Need Thwarting [NEW]

Although the original SDT assumption that intrinsic motivation can be stimulated by the satisfaction of the needs of autonomy, competence, and relatedness is long-established, recent meta-analytical studies have sharpened our insight into the classroom ecology, promoting or inhibiting these needs. One of the most significant developments made in this review is the disentanglement between need-supportive and need-thwarting behaviors which is not viewed as a pair of opposite ends of one scale but as two distinct dimensions which are negatively related to each other (Howard et al., 2025). The implications of this dual-process model to the implementation of FA in the Sri Lankan classrooms are tremendous.

Student psychological needs are fostered by the need-supportive behaviors. Autonomy support entails offering purposeful options, reasons in which tasks are carried out and even recognizing the student opinion. Competence support (also known as structure) entails clear expectations, optimal challenge and process feedback. Relatedness support entails the expression of warmth, empathy and unconditional positive regard (Deci and Ryan, 2000). On the other hand, the need-thwarting behaviors proactively frustrate the needs. The behaviors (autonomy-thwarting) are under control with the help of rewards or punishments to elicit compliance, prescribing strict goals, and speaking in a threatening way. Chaos (competence-thwarting) is the lack of expectations and inconsistency of feedback. Rejection (relatedness-thwarting) is the demonstration of neglect or selective attention (Howard et al., 2025).

Howard et al. (2025) conducted a meta-analysis of 388,912 students and identified a positive relationship between need-supportive behaviors and engagement, achievement, and well-being, and the opposite result with need-thwarting behaviors. Importantly, a lack of support is not equal to active thwarting; a teacher can be low in terms of autonomy support (e.g., providing no alternatives) but be control-based (e.g., through the use of threats). Nevertheless, in high stakes, exam-oriented contexts, such as Sri Lanka, the controlling teaching practice is likely to be very common.

Implications to FA in Sri Lanka: A proper FA intervention should therefore accomplish both: (1) need support should be increased by inculcating autonomy (e.g., self-assessment choices), competence (e.g., rubric-based feedback), and relatedness (e.g., peer assessment) in practice; and (2) need-thwarting should be actively reduced, replacing practices that increase control (e.g., grading every homework, public ranking) with informational, low-stakes feedback. Even a carefully planned FA program may fail to succeed in case of failure to address the given dark pathway of the habitual controlling practices that are already present.

#### 2.5. Teacher Assessment Literacy Mediator [NEW]

The disjoint between the policy of the FA and classroom practice has always been narrowed down to a single and powerful element which is Teacher Assessment Literacy (TAL) (Pastore, 2025). TAL goes beyond the understanding of FA techniques (e.g., how to provide feedback) to include the understanding of the purpose of assessment, the ethical principle of fairness, and the capacity to then interpret and utilize assessment data to make instructional changes (Pastore, 2025).

Recent scoping and empirical studies in the similar Global South contexts show similar problems. To begin with, there is a lot of conceptual confusion: educators tend to confuse FA with ongoing summative assessment, which is aimed at gathering grades to put them on mark sheets instead of relying on feedback to guide further teaching (Mngomezulu et al., 2025). In a study of Italian primary teachers, Pastore (2025) observed that despite a required reform and professional development, the study sample did not possess a clear conceptual view of the theory and practice of formative assessment, and defined the policy requirements as being ambiguous.

Second, there is poor practice of feedback. Even the feedback given by teachers is usually evaluative (e.g., good job, 70 percent) as opposed to being constructive and task-oriented (e.g., Your hypothesis is clear, next, check whether your method controls X). In fact, evaluative feedback may

adversely affect competence needs because it puts students on performance targets and not mastery (Hattie and Timperley, 2007, as cited in Mngomezulu et al., 2025).

Third, self-efficacy gap is of utmost importance. The relationship between TAL and teacher self-efficacy- the belief in personal capacity to perform FA practices is positive. Reduced self-efficacy causes evading the complex FA strategies (e.g., peer evaluation, student goal-setting) and returning to familiar and teacher-controlled ones (Shao, 2025).

Shao (2025) trailed two novice teachers in China to the process of developing TAL in three semesters. Their patterns revealed that the development of TAL is very experiential as it goes through acquaintance with the concepts of FA, adjusting to their particular context, and ultimately applying them with reflective agency. Importantly, this process needed to be supported systematically, cooperate with others, and be allowed to reflect on the matter, which is hard to come by in under-resourced systems. Implications to Sri Lanka the success of the 2026 reforms will depend on the fact that TAL is seen as a developmental process, rather than a training event. The professional development has to be maintained, practice based and centered on the reasons, and the occasions of FA strategies, but not how. It should also be clear with the motivation beliefs and self-efficacy of teachers towards change.

### 3. Projecting Formative Assessment to Sri Lanka 2026 Reforms

#### 3.1. *The Correspondence Between FA Principles and Reform Objectives*

The education reforms in Sri Lanka, which are to be realized in 2026, clearly state that the target is to decrease the stress and competition among students and replace the rote memorization with the assessment of the competency. These are the goals that closely correspond to the features of the formative assessment that is focused on continual feedback, student-centeredness, and learning in pairs. The goal of reform which is to decrease student stress and anxiety is similar to the focus of FA that places its stress on low-stakes tests. The change in the rote memorization to competency is in line with the emphasis on the application of skills and critical thinking at FA. The concept of balancing school-based assessment and examination scores corresponds to the interest of FA in process and progress. Encouraging more advanced learning would be in line with peer feedback and reflection as part of FA activities. The skills of the 21st-century are in line with the peer assessment in the development of teamwork and self-assessment that develops metacognition.

#### 3.2. *GPA System and Ongoing Assessment*

The implementation of a GPA-based grading system is an important chance where formative assessment is likely to establish in the Sri Lankan secondary schools. The GPA system, unlike the traditional letter-grade system, that trains students to concentrate on getting a certain grade, facilitates a cumulative-wholesome evaluation of the student progress. The GPA system, together with the formative assessment practices, can assist students to monitor their learning process over the time, pinpoint their scope of improvement and decrease the high-stakes exams focus. Nonetheless, unless teacher training is done properly and there are clear guidelines that need to be adhered to, there is a possibility that the new system can just end up being an administrative gimmick and not a pedagogical one.

#### 3.3. *The Problem: Implementation in the Absence of a Psychological Framework*

Although the reform documents highlight the structural reforms that are required, it does not give much information on psychological and pedagogical side of formative assessment. A mere increase in the rate of assessments and lack of the support required by students in terms of their psychological needs will probably lead to the development of more stress and disengagement instead of better learning outcomes (Ryan and Deci, 2020).

## 4. Implementation Problems in the Sri Lankan Context

### 4.1. Large Class Sizes

Classrooms in Sri Lankan secondary schools usually range between 40 and 60 students with a few going to 70 in towns. This poses a major difficulty in the implementation of formative assessment since in such large groups of people it is not easy to provide individualized feedback. Whole-class feedback routines, peer assessment and self-assessment should thus be a priority option as scalable options (Black and Wiliam, 2009).

### 4.2. Teacher Assessment Literacy

The training given to most Sri Lankan secondary teachers has been mainly on the summative methods of assessment and most of them have little experience of formative assessment. As it is mentioned in Section 2.5, the conceptual confusion that has been observed in similar situations (Pastore, 2025; Mngomezulu et al., 2025) is developmental in nature, which means that the professional development of Sri Lankan teachers will have to be extensive and long-lasting.

### 4.3. Exam-Driven Culture

Even though the competency-based assessment has taken the place, the culture of high-stakes examinations is deeply embedded in the education system of Sri Lanka. Educators might be reluctant to embrace the formative assessment practices because of the perception that they do not contribute to the success of examinations. Consequently, the mechanisms of formative assessment should be clearly connected with the preparation of exams so that the teachers and students can realize its importance.

### 4.4. Resource Disparities

In Sri Lanka, urban and rural schools have a huge gap in terms of resources available to them. The urban schools might be equipped with digital tools and other modern teaching materials, whereas rural schools can experience several issues, including the lack of access to electricity, internet, and computers (Ministry of Education, Sri Lanka, 2024). The instruments of formative assessment should be created to operate in environments with low resources, and they should focus on low-tech and no-tech options.

### 4.5. Subject-Specific Considerations

Formative assessment should be modified according to various subjects. As an illustration, formative assessment in mathematics can be used to target problem-solving processes, problem error analysis, whereas in languages, it can target writing and speaking skills (Mngomezulu et al., 2025). Subject-specific guidance and training, in turn, will be required by educators.

### 4.6. Digital Divide as an Implementation Fissure [NEW]

The 2026 reforms optimistically include digitalization in all five pillars, and it is projected to have a national education profile of any learner with digital portfolios and online assessment tools (Ministry of Education, Sri Lanka, 2025). Although digital FA tools are scalable and efficient (e.g., automated quizzes, online platforms of peer feedbacks), their introduction in Sri Lanka will make inequalities worse. Advanced use of generative AI in assessment design was presented at Singapore Assessment Symposium 2025 (Tan, 2025), although it assumes the availability of a dependable infrastructure and the digital literacy of teachers. Conversely, schools in numerous areas of Sri Lanka, especially rural plantation and North-Eastern ones, experience power outages, poor internet speed, and a lack of equipment (Office of the Cabinet of Ministers, Sri Lanka, 2024). An exclusively digital structure of FA would effectively marginalize such students, which would be against the objectives

of the reform of the equity. Thus, the FA tools should be predesigned according to low-tech/high-touch concept: more emphasis should be put on the paper-based, verbal and collaborative approaches that can be implemented in any environment, and digital tools are added as an addition, not necessity.

#### 4.7. Pedagogical Content Knowledge Subject-Specific to FA [NEW]

Formative assessment is not a skill that is generic, but it needs pedagogical content knowledge (PCK) that is knowledge-based on the discipline (Mngomezulu et al., 2025). The strategy used to solve problems in mathematics (e.g., studying patterns of common errors in algebra) would resemble an entirely different strategy used to write an essay in history (e.g., peer review of writing on argument use and source use) or to do laboratory work (e.g., observational checklists on safety and technique). The Mngomezulu et al. (2025) intervention in South African classrooms in physical sciences indicated that the success of an FA intervention required the adaptation of general FA principles (e.g., explanation of the success criteria) into subject-specific language and activities by the teachers. There is lack of generic FA training. Teacher professional development in Sri Lanka should thus be subject-streamed and master teachers in mathematics, science, languages and humanities should be modeling FA practices in their particular content areas.

## 5. FA Implementation Contextualized Model in Secondary School in Sri Lanka

### 5.1. Fundamental Guidelines to FA Implementation

The model suggested is based on five principles, which are based on SDT (Deci and Ryan, 2000; Howard et al., 2025), teacher assessment literacy studies (Pastore, 2025; Shao, 2025), and analyses of the situation in Sri Lanka (Ministry of Education, 2024, 2025; Vijayakumaran

Principle 1: Begin with Relatedness. Teenage students are more concerned with being part of the group and bonding with the teacher (Niemic and Ryan, 2009). In big Sri Lankan classrooms (which are usually 1:60 or even higher), the need of relatedness is the most overlooked. The important point here is that FA must first establish classroom community by using low-stakes and collaborative practices before applying autonomous or competence-related strategies.

Principle 2: Develop Independence slowly. Students who have been conditioned into a system of examinations where obedience is rewarded can feel anxiety when they are allowed to do something with little or no scaffolding (Ryan and Deci, 2020). The autonomy must be implemented gradually: initially, limited options should be provided, followed by co-defining the success criteria, and eventually, student-directed goal-setting needs to be supported.

Principle 3: Maintain Competence via Feedback. Competence also demands frequent and task-oriented feedback that explains to the learners their position, their direction and how to bridge the gap (Black and Wiliam, 2009). Short cycles of practicing, receiving feedback, and revising must be implemented among students who have internalized years of feedback of failure (Zhang et al., 2025).

Principle 4: Change to Local Constraints. Any national FA system should incorporate the low-tech, no-tech approach to resource-poor schools in the rural areas. Digital tools are not mandatory, they are just improvements.

Principle 5: entrench Subject-Specific Pedagogical Content Knowledge. The generic FA training is inadequate. The teachers should observe the application of FA to the process of analyzing errors in mathematics, revising hypotheses in science, argumentation in history, and writing portfolios in languages.

### 5.2. A Tiered Implementation Framework Using Classroom Illustrations

Schools are placed at their respective levels according to their capacities and there are well defined steps to follow.

Tier 1: Entry (No training needed). Plans do not need materials and grading. Entry/exit tickets demand one question at the beginning or the end of the lesson (Write one thing you have learned and one question you still have). The number of positives and suggestions is two and one respectively in Two stars and a Wish. Think-Pair-Share consists of an individual thinking, a discussion between two, and sharing with the entire class. Colored Card Check involves the use of red (confused), yellow (cautious) and green (ready) cards to provide a quick visual response. One-Minute Paper Students write one minute on a prompt; teacher reads to develop the following lesson.

Tier 2: Developing (Needs 1 -2 workshops). Learning Goal Setting; The students are asked to write 1 to 3 personal goals in each unit covered weekly. The Peer assessment based on rubrics is a one-dimensional 3-level rubric (beginning, developing, proficient). Self-Assessment Checklists involve the students who have to confirm successful criteria prior to submission. Feedback Forward requests the students to complete the sentence with the sentence "Based on this feedback, I will... by changing the passive reception to active goal-setting. Group Reflection; Group reflection entails small groups debating about what worked, what was challenging, and what would have been better.

Tier 3: Advanced (Involves continuous coaching). Portfolio Assessment gathers drafts, feedbacks, revisions and reflections in the course of time. Student-Led Conferences involve putting the student into the forefront to show their portfolio and goals to be achieved as the teacher listens. Co-Constructed Success Criteria entails the teacher and students coming up with rubrics jointly prior to the commencement of assignments. Online quizzes (Digital Tools) are presented selectively in case the schools have sufficient infrastructure.

Progression Pathways: Advance Tier 1 to Tier 2 in case the teachers report feeling comfortable and students react positively. Tier 2 to Tier 3: In cases where teachers are able to provide SDT rationales and the students are able to show self-regulation (e.g., they start peer feedback without a prompt).

### 5.3. Subject-Specific Adaptations

The strategies of generic FA need to be transformed into other practices of the discipline (Mngomezulu et al., 2025). In mathematics, an error analysis strategy is to do My Favorite Mistake - teacher gives an error that is common to all; the students in the class analyze and correct it. In science, use Prediction-Observation-Explanation (POE): with a prediction, students are shown a demonstration, and then they need to explain any difference. Languages Use Peer Response Sheets guided questions (What is the main idea? What works well? One question is what? (Self-editing Checklists of non-negotiable conventions). In history/social studies, write Claim-Support-Question: students should write one claim, one evidence-based support and one question left. The critique protocol to use in aesthetics is the I like, I wish, I wonder.

### 5.4. Overcoming the Dark Pathway: Anti-Thwarting Checklist

Following Howard et al. (2025), incorporation of need-thwarting behaviors in the active reduction is necessary in order to have an effective FA, rather than just some need-supportive behaviors. To be independent, lessen the use of grades to discipline, open ranking and inflexible targets devoid of participation. Rather adopt unmarked descriptive feedback, anonymous models and shared objectives. To be competent, minimize vague feedbacks, evaluative-only feedbacks, and unclear criteria. Rather, apply task oriented specific feedback, descriptive feedback followed by grades and rubrics pre-shared. To be related, minimize disregard to student inquiries, impatience with student errors and conditional respect. Rather, accept any questions, make mistakes regular learning information, and demonstrate unconditional positive regard. An actual change: This is 10 points of homework you do not do; otherwise your grade will be lowered to This practice set prepares you to the quiz next week. Attempt it, no grading.

### 5.5. Teacher Assessment Literacy Building: Phased Professional Development Model

On the basis of Shao (2025) and Pastore (2025), the development of the TAL takes 1836 months in three stages.

Phase 1: Foundational (Months 06): Conceptual Change. There are Misconception Inventory (teachers identify and discuss FA misconceptions), SDT Primer (analyze teaching videos on need-support vs. need-thwart), and Feedback Practice Lab (practice writing task-focused feedback on anonymous student work), and Low-Stakes Implementation (implement one Tier 1 strategy per week). The indicators of success: teachers discuss three distinctions between FA and summative assessment, name two need-thwarting behaviors that they engage in now, switch feedback between evaluative and descriptive, and 80 percent of them apply a Tier 1 strategy at least once a week.

Phase 2: Experiential (Month 6 18) -Collaborative Adaptation. Such activities as Teacher Learning Communities (biweekly meetings with your subject group to talk about strategies and analyze student work), Peer Observation (monitor a colleague during their FA practice and take notes), One Strategy One Month (whole school concentrates on one strategy of FA), and Student Voice Panels (students discuss what they find helpful or confusing about FA during a weekly meeting) are used. Measures of success: TLCs convene on a regular basis, teachers make three peer observations every term, strategies are observable in the classroom, and teachers report having at least one practice change grounded on student feedback.

Phase 3: Adaptive (Months 18 36) Reflective Agency. Activities involve FA Sequence Design (design an FA cycle with SDT rationales in 23 weeks), Data-Driven Instruction Meetings (departments start meetings with FA data analysis in order to plan the next steps) and Action Research (each teacher runs a test based on one question using simple pre/post data). Success indicators: The teachers will write written FA plans with SDT rationales, instructional decisions will clearly be connected with FA data and teachers will complete one action research cycle and share it.

Systemic Supports in all Stages. Time protected by TLC (meetings not optional) The responsibility of the School Principal. The Zonal Education Office provides instructions Coaches (one every 20-30 teachers who have training in SDT and FA). Master Teachers maintain Exemplar Banks (examples of FA used by the classes of Sri Lanka). The School Leadership is in charge of Recognition, Not Ranking (celebrating implementation without competition).

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## 6. Research Agenda

### 6.1. Methodological Justification

This research agenda fills four gaps in evidence that were found in this review. First, Zhang et al. (2025) only gave quasi-experimental evidence of SDT-aligned formative assessment in China, and there is no causal evidence of SDT-aligned formative assessment in Sri Lankan secondary classrooms. Second, teacher assessment literacy has been researched both in Western and Chinese settings (Pastore, 2025; Shao, 2025), but no research has investigated how TAL is being developed in the exam-based, large-class setting of Sri Lanka. Third, although the dual-process model of need support and need thwarting developed by Howard et al. (2025) has been tested in the general educational context, it has never been applied to FA implementation. Fourth, both subject-specific adaptations and digital divide are a hotly under-researched topic in Global South FA. The research questions that follow are geared to fill these gaps with rigorous and contextually adequate methodologies.

The following priorities are short-term (in 12-24 months):

Research Question 1 (Causal Effectiveness): How does a 12-week SDT-consistent FA intervention (expressly training teachers in need-support and need-thwarting reduction) affect autonomy, competence, relatedness, and end-of-term achievement of secondary students in Sinhala-medium mathematics and science classes?

This investigation is guided by three hypotheses. To begin with, intervention group students will demonstrate much superior post-test results of Basic Psychological Need Satisfaction Scale (BPNSS) than controls. Second, the intervention group will show greater end-of-term mathematics and science, adjusting pre-test scores. Third, the impact of the intervention on achievement will be partially mediated by the changes in autonomy and relatedness but not competence, in line with the results of Zhang et al. (2025) that the effect of competence might take more time to manifest.

The type of proposed design is a two-arm and cluster-randomized controlled trial where randomization will be on a school level to avoid contamination between the intervention and the control conditions. The target population will be Grade 9 students (age 1415) in two government secondary schools in Sinhala-medium that belong to two different contexts, like Western Province (urban) and North Central Province (rural). The sample population will consist of 20 schools (10 intervention, 10 control) of around 1,000 students total (50 students per school). A power analysis with a medium effect size ( $d = 0.4$ ),  $\alpha = 0.05$ , power = 0.80, and an intraclass correlation of 0.10, shows that at least 20 clusters must be used.

Phase 1 and Phase 2 TAL training (described in Section 5.5) will be applied to teachers in intervention schools over 12 weeks, and they will apply Tier 1 and Tier 2 FA strategies (described in Section 5.2) in their mathematics and science classrooms. Control schools will carry on with their currently used school-based assessment practices and will be given the intervention at the end of the study as an ethical requirement. The BPNSS (12 items) measuring psychological need satisfaction is one of the primary outcome measures. The Intrinsic Motivation Inventory subscales and end-of-term school-standardized examination scores are the secondary outcomes. The covariates will be pre-test BPNSS scores, past academic achievement, gender of the student and size of the school. Data will be collected at four points which include: pre-test, Week 0, mid-test, Week 6, post-test, Week 12, and achievement follow-up, Week 14. Multilevel linear models with students within the school, intent-to-treat analysis, and mediation through the use of structural equation models will be used in the analysis.

Research Question 2 (Teacher Mechanisms): How does the pre-existing assessment literacy and self-efficacy beliefs of Sri Lankan secondary teachers mediate their adoption of FA practices in the 2026 reforms, and how implementation fidelity is predicted by school-level factors (e.g., principal support, class size, resource availability)?

The question will be answered by a mixed-methods sequential explanatory design that will be carried out by quantitative data collection followed by qualitative interviews that will explain and elaborate the quantitative results. A stratified random sample of 500 secondary teachers (Grades 611) will be selected in the quantitative phase in all the nine provinces of Sri Lanka. Variables that are going to be stratified will be urban/rural location, school type (1AB, 1C, Type 2), and subject area (mathematics/science, languages, humanities). There will be three instruments used. The Teacher Assessment Literacy Scale (TALS) is a 24-item 5-point Likert scale based on an adapted version of the Pastore (2025) scale and is expected to have a reliability of over 0.85. The Teacher Self-Efficacy for FA (TSE-FA) scale has 12 items. Implementation Fidelity Log will document the self-reported frequency of 12 specific FA practices used by the teachers on a spectrum of never to daily. Besides, survey data will be gathered at the school level using a survey filled out by principals, which will include average class size, access to digital devices, hours of professional development, and collaborative culture. Hierarchy linear modeling featuring chain of schools with teachers in the nest will be used to analyze. TALS and TSE-FA scores will be used as the moderators. The predictors will involve the size of classes, online access, hours of professional development, and support of the principal. The outcome variable will be implementation fidelity.

The qualitative phase will involve the use of purposeful sampling to identify 30 teachers in the quantitative sample: 10 high implementers (high TALS, high fidelity), 10 low implementers (low TALS, low fidelity) and 10 inconsistent implementers (high TALS but low fidelity, or low TALS but high fidelity). The participants will undergo a 45-minute semi-structured interview that will address the barriers and enablers to FA implementation, their knowledge of the purpose of FA, their

experience with professional development, the factors of the school culture, and student reaction to the FA practices. One of the interview questions is a sample: Can you tell about a situation when you tried an FA strategy and it failed to work as anticipated? What happened?" Thematic analysis involving two independent coders will be used to transcribe and analyze the interviews through a six-phase thematic analysis framework by Braun and Clarke (2006) to guarantee an inter-rater reliability  $>0.80$ . Quantitative and qualitative results will be integrated into each other on a joint display matrix comparing quantitative profiles (e.g., high TALS scores) with qualitative themes (e.g., I understand FA but my principal demands grade every week).

### 6.3. Longer-Term Priorities (24–60 Months)

Research Question 3 (Contextual Fit in Low-Resource Settings): In what ways do teachers in high-needs settings (large classes (more than 50 students) with low digital access and rural settings) adjust low-tech FA strategies to sustain need-support, and how does that affect student engagement and perceived relatedness?

Design-Based Research (DBR) will be used to answer this question in two academic years. DBR is especially suitable since it strikes a balance between rigorous research and practical co-design, resulting in useful tools and theoretical understanding (McKenney and Reeves, 2019). The research will have four stages. Phase 1 (Analysis, Months 13): During the first phase of the research, the researchers will collaborate with five rural schools that will involve about 30 teachers and 1500 students. Observations in classrooms and teacher focus groups will be performed to learn about the current assessment practices, challenges and resources available. The result will be a problem specification and first design principles. Phase 2 (Co-Design, Months 46): During Phase 2, the teacher and researchers will co-design a Low-Tech FA Toolkit of paper-based, oral, and group-based strategies that do not need electricity or internet access. Every strategy will contain a teacher script and a template facing the student. The deliverable will be a prototype toolkit comprising of about 20 strategies. Phase 3 (Iterative Implementation, Months 718) will involve three implementation cycles of 12 weeks each. Quantitative data (survey of student engagement and short, motivation scales) and qualitative data (teacher logs, focus groups, video recordings in the classroom) will be gathered after every cycle. The adjustments to the toolkit will be introduced after every cycle on the basis of these data. A polished toolkit and guidelines of implementation will be the outputs. Phase 4 (Evaluation, Months 19 24): In this phase, a quasi-experimental comparison between the five schools of the intervention and five similar comparison schools in the same region that have similar demographics will be carried out. Pre- and post-measures will consist of student relatedness (peer belonging and teacher connection, measured with the relatedness subscale of the BPNSS), student engagement (behavioral, emotional, and cognitive, measured with the Student Engagement Instrument) and achievement (school-based common assessments). The deliverables will include the estimates of the effect sizes and the sustainability analysis.

Research Question 4 (Subject-Specific Adaptations): Are there significant differences in the impact of SDT-aligned FA on student achievement and student motivation depending on subject area (mathematics, science, language, social studies), and what subject-specific TAL competencies are needed?

The question will be answered using a comparative multiple-case study research design (Yin, 2018) involving four subject-area cases. The four topics chosen include Mathematics, Science (Physical or Life Sciences), and Language (Sinhalese or Tamil) and Social Studies (history or Geography). The four cases will be placed in one school to normalize the school-level variables of leadership, resources, and culture. In the respective subject cases, there will be 3 teachers and about 90 students (30 students per teacher) in Grade 9 level. The intervention is composed of an eight-week standardized training of FA teachers (the same content applies to all subjects) and an adaptation workshop where the subjects specific to each teacher where they apply the general principles of FA to their practice. The sources of data will be quantitative (BPNSS, Intrinsic Motivation Inventory, and achievement pre- and post-intervention) and qualitative (four lessons of classroom video recordings

of a teacher pre- and post-intervention, student focus groups of five students in each classroom, teacher interviews, and student work sample analysis of 10 samples per teacher). The descriptive statistics of quantitative data and thematic analysis of qualitative data will be applied in within-case analysis. A comparative matrix will be employed to carry out cross-case analysis to determine subject-differentiating patterns of adaptation and the differences in effects. Predicted deliverables will be a subject-specific framework of FA competencies that will include tangible tools that include error analysis feedback scripts in mathematics, hypothesis revising protocols in science, peer response sentence stems in languages, and source analysis checklists in social studies.

#### 6.4. Cross-Cutting Methodological Recommendations

There are a number of cross-cutting suggestions that are applicable to all research questions. First, all instruments (BPNSS, IMI, TALS) must be tested in the Western setting but must be cognitively interviewed with the Sri Lankan teachers and students to see whether they are culturally acceptable and whether they are translated into Sinhala and Tamil. Second, fidelity measures have to be included in all studies, since without the data on the fidelity, the null results cannot be used to determine the difference between “FA does not work” and “FA was not implemented” results. Self-report logs should be used with classroom observation protocols, including Classroom Assessment Scoring System, modified to FA. Third, the digital divide has to be proactively addressed in the research designs, with paper-based and verbal FA measures involved; digital tools access will systematically be excluded in studies that assume this access, and biased and inequitable results will be obtained. Fourth, formal collaboration with the Ministry of Education, Sri Lanka, to ensure access to schools, ethical approval and policy relevancy is required in all the research. The research questions are to be co-designed with the stakeholders of the Ministry to make sure that the findings directly influence the implementation of reforms. Fifth, any project must incorporate a sustainability aspect where local master teachers are trained to be co-researchers and future trainers so that the research capability is not lost upon termination of external funding or collaboration.

## 7. Conclusion

### 7.1. Theoretical Contributions

The three theoretical contributions to literature on formative assessment, Self-Determination Theory and education reform in Global South settings that have been made through this review are interconnected.

To start with, the review has contributed to the use of SDT in FA by incorporating the dual-process model of need support and need thwarting (Howard et al., 2025). The previous studies in the field of FA have paid practically no attention to the ways in which the practices of FA promote autonomy, competence, and relatedness (e.g., Zhang et al., 2025; Aust et al., 2024). Nevertheless, in exam-based systems such as Sri Lanka, the default classroom ecology is usually defined by the control over instructional practice such as public ranking and grade-based punishment, disorderly or indistinct expectations, and conditional relatedness in which teacher attention is conditional on student outcomes. In this review, it has been stated that to have an effective implementation of FA, it is not only necessary to add need-supportive practices, but also eliminate these need-thwarting behaviors. Section 5.4 of the paper offers a tangible tool of this dual agenda with the Anti-Thwarting Checklist, which deals with a lacuna that the literature about the FA has been leaving out.

Second, this review has integrated the recent evidence about teacher assessment literacy (Pastore, 2025; Shao, 2025) to redefine teacher professional development as an experience-based, developmental, and subject-specific process, as opposed to a training event. It is empirically invalid to assume that a single workshop on how to do formative assessment will transform the practice of teachers. Rather, the present review has suggested a staged TAL model in the 18-36 months with three successive stages: Foundational (conceptual change), Experiential (collaborative adaptation), and Adaptive (reflective agency). The phases have certain activities and clearly defined success

indicators, as the development of TAL should be based on the collaboration of peers, learning practice, and student voice.

Third, these global theories have been put into context in this review in the unique implementing environment of Sri Lanka. This review has outgrown generic FA recommendations by focusing on particular challenges, such as huge class sizes (more than 60 students), urban versus rural school digital divide, subject-specific knowledge of pedagogy content requirements, and the culture of examination that is so deep-rooted. The tier-based implementation plan (Entry, Developing, Advanced) recognizes the fact that not all schools in Sri Lanka are made up of homogenous student populations, thus an urban school with 35 students and access to computers needs to implement different FA strategies in comparison to a rural school with 70 students and no electricity. The topic-specific modifications that are made to mathematics, science, languages, history, and aesthetics present tangible advice which can never be offered by generic FA training.

### 7.2. Summary of Practical Contributions

To policymakers at the Ministry of Education and provincial education authorities, this review serves as an effective explanation as to why FA needs to be based on SDT principles and not put into practice as a procedural checklist. Section 3.1, alignment table illustrates that the direct application of FA practices is linked to all the 2026 reform goals, such as alleviating stress in students to building 21st-century skills. More importantly, this review cautions that in the absence of the psychological construct of SDT, the reforms will only be reduced to structural changes that will not change the lives of students in classrooms.

To school principals and teacher educators, this review would provide the tiered implementation framework (Section 5.2) with classroom illustrations at each level so that schools may join on the level that they are able and then move at a pace that they are capable of. In the Anti-Thwarting Checklist (Section 5.4), teachers are given specific before and after situations which they can put into practice instantly, i.e., the change of the statements like This homework is worth 10 points; if you do not submit it, your grade drops to This practice set prepares you to take a quiz next week. Try it without grading. Bring your questions to class. The phased TAL professional development model (Section 5.5) provides a realistic time frame of 18 to 36 months with particular activities, success indicators, and systemic supports such as the protected Teacher Learning Community time, instructional coaches, exemplar banks, and recognition systems which do not promote competition.

In the case of classroom teachers, this review offers 15 specific FA strategies (at three levels) with description, SDT mechanism, and classroom example of the subject. The entry and exit tickets, Two Stars and a Wish, Think-Pair-Share, Colored Card Check and the One-Minute Paper are tier 1 strategies that do not need training or any materials and can be implemented by teachers who have no confidence or competence yet, then they can add more advanced strategies as they grow more confident and competent.

### 7.3. Limitations and Caveats

It has to be noted that there are a number of limitations of this review. To begin with, although this review has compiled the evidence on various international settings such as China (Zhang et al., 2025), Italy (Pastore, 2025), South Africa (Mngomezulu et al., 2025), and the Netherlands (De Jonge et al., 2025), the empirical background on this topic in the Sri Lankan context of secondary classrooms is not extensive. The study by Vijayakumaran et al. (2023) directly studied the principles of SDT in secondary physics but was not specifically on FA. Section 6 has proposed a research agenda that will fill this gap, though it will be necessary to conduct such studies before a recommendation can be made, the recommendation has to be implemented with due caution.

Second, the review has mainly concentrated on secondary education (Grades 6-11) and has not offered a systematic coverage of special developmental and structural concerns of both primary education and senior secondary (Grades 12-13). There are greater needs among younger students in

terms of self-assessment and peer-feedback, and there are special motivational pressures on senior secondary students as they prepare to take university entrance examinations which are not well covered in this review.

Third, the review has presupposed that the reforms will be introduced in accordance with the descriptions provided in the Ministry documents (Ministry of Education, 2024, 2025). The reforms might be slowed down, watered down, or refocused by political, economic or administrative upheavals. The contextualized model herein provided is resistant to these kinds of disruptions by focusing on low-cost, low-tech, changes at the classroom level, which do not rely on the massive investments in infrastructure, but the threat is present.

Fourth, need support and need thwarting as dual-process model has been confirmed in the Western educational setting (Howard et al., 2025). Although probably it is universal the manifestations of need-thwarting behaviors may vary in Sri Lankan cultures with stronger hierarchical teacher-student relationships and examination pressure. The Anti-Thwarting Checklist should be tested on the Sri Lankan teachers and students in future studies.

#### *7.4. Policy and Practice Recommendations*

In accordance with the evidence synthesis in the present review, there are five recommendations that can be provided to policymakers and practitioners who are going to implement the 2026 reforms.

To start with, the Ministry of Education must establish a requirement that any FA professional development of teachers in the secondary schools be clearly based on SDT principles, both need-support and need-thwarting reduction. The contracts of professional development and provider qualification must demand the knowledge of SDT, rather than the knowledge of assessment methods.

Second, school principals ought to redesign schedules in order to safeguard weekly Teacher Learning Community meetings by subject area. Such meetings must be regarded as mandatory training, rather than optional extras. Attendance should be guaranteed by substitute teachers or modified schedules. The data provided by Shao (2025) and Pastore (2025) shows that the collaboration with peers is the most potent mechanism of TAL development.

Third, SDT-aligned FA instructional coaches should be recruited and trained by the zonal education offices by a 1:20 to 1:30 teacher ratio. The coaches are supposed to offer non-evaluative classroom observation and feedback, but they should only concentrate on FA practices but not the overall teaching assessment. Such coaching infrastructure must be given the first priority when compared to the use of one-time workshops, which have always failed to transform the practice of the teachers (Pastore, 2025).

Fourth, the schools are advised to use the tiered model, which involves Tier 1 strategies on a school-wide basis during the first term of the reform. Tier 2 and Tier 3 strategies should not be imposed on any teacher until he or she reports that he/she is comfortable with Tier 1 and students react positively. Early transition to advanced strategies prior to the establishment of the basic practices will most probably lead to frustration of the teacher and confusions among students.

Fifth, the Ministry would create and share subject-specific exemplar banks that would include the FA examples in the Sri Lankan classrooms in Sinhalese, Tamil, and English. These exemplars ought to have student work examples with descriptive feedback, teacher reflection notes as well as video clips of the classroom implementation. Translated generic FA based on foreign examples are not enough; the teachers should observe FA at work with their curriculum, language, and culture.

#### *7.5. Final Conclusion*

The Sri Lankan education reforms of 2026 present an unmatched challenge to transform the assessment practice of the secondary education. Nevertheless, such reforms can only be successful as they should be supported by a pedagogical framework, which considers the psychological needs of students to autonomy, competence, and relatedness, as the Self-Determination Theory (Deci and Ryan, 2000). These principles have to be incorporated in the reforms lest the reforms become another structural change that will not revolutionize the core experiences of students in classrooms.

Formative assessment is based on SDT, which presents the required pedagogic base to support the motivational changes that are required to ensure the 2026 reforms are affected successfully. The data provided by Zhang et al. (2025), Aust et al. (2024), De Jonge et al. (2025), Mngomezulu et al. (2025), and Vijayakumaran et al. (2023) continuously testify to the possibility of the formative assessment to boost the motivation of students with the fulfillment of their psychological needs. This advantage is however conditional to quality of implementation. FA should go beyond procedural alterations and be a constituent component of the classroom culture in which feedback, self-assessment, peer interaction, and setting goals are standard practices that enable students to be in control of their learning process.

This review has developed the theoretical foundation of this argument, incorporating the dual-process model of need support and need thwarting (Howard et al., 2025) and coming out clearly that to effectively implement FA, a combination of supportive practices must be added and controlling, chaotic, and rejecting teaching practices that have become normalized in exam-based systems must be actively removed. Moreover, this review has highlighted the fact that teacher assessment literacy is an evolutionary, contextual, competence that needs to be constructed during a period of 18 to 36 months of sustained, practice-based professional development (Pastore, 2025; Shao, 2025).

The suggested contextualized model of implementing FA with Sri Lanka focuses on initiating relational practices, which will be followed by increasing autonomy and maintaining competence development as a result of feedback loops. The tiered implementation model, subject-specific adaptations, Anti-Thwarting Checklist, and staged TAL development model provide actual practical instruments to school administrators, teachers, and policy-makers. The research agenda gives priority on rigorous causal evidence based on randomized controlled trials, mixed methods implementation science, design-based research in the rural context and comparative case studies in subjects.

The evidence indicates that although the 2026 reforms can contribute to the alleviation of examination stress and more comprehensive approach to learning among students, their effectiveness will be dependent on whether FA will be applied in a focus of motivation. The teachers should be facilitated with continuous professional growth and the leaders of the schools should focus on developing a classroom atmosphere where learning is not seen as a crucial tool of exam passing.

To summarize, the 2026 proposed education reforms are indeed a step in the right direction to changing the system of secondary education in Sri Lanka, yet this step can succeed only with the introduction of the so-called formative assessment as a means of achieving intrinsic motivation and a more comprehensive learning process. By incorporating the SDT principles, i.e., the intentional minimization of need-thwarting behavior and the systematic cultivation of teacher assessment literacy, Sri Lanka will be able to transition to the classroom success instead of the examination stress and eventually benefit not only the students but also the teachers and the educational environment in general.

## References

- Aust, L., Schütze, B., Hoch Weber, J., & Souvignier, E. (2024). Effects of formative assessment on intrinsic motivation in primary school mathematics instruction. *European Journal of Psychology of Education*, 39(3), 2177–2200.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- De Jonge, M., Van den Broeck, L., & Struyven, K. (2025). Goal clarification and feedback before low-stakes tests: Reducing test anxiety and improving performance. *Assessment in Education: Principles, Policy & Practice*, 32(1), 45–67.

- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X., & Ryan, R. M. (2025). A meta-analysis of need-supportive and need-thwarting teaching behaviors: Differential effects on student motivation, engagement, and achievement. *Journal of Educational Psychology*, 117(2), 301–329.
- McKenney, S., & Reeves, T. C. (2019). *Conducting educational design research* (2nd ed.). Routledge.
- Ministry of Education, Sri Lanka. (2024). *National Education Policy Framework (2023–2033)*. Government Press.
- Ministry of Education, Sri Lanka. (2025). *Transforming General Education: Reform Implementation Guidelines 2026*. Government Press.
- Mngomezulu, H., Ramaila, S., & Mavuru, L. (2025). Improving learners’ attitudes in physical sciences through formative assessment: An intervention study. *Eurasia Journal of Mathematics, Science and Technology Education*, 21(12), em2740.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133–144.
- Office of the Cabinet of Ministers, Sri Lanka. (2024). *Reforming the Education Administration System for Drastic Transformative Change in Education*. Government Press.
- Pastore, S. (2025). Teacher assessment literacy: A scoping review of conceptualizations and empirical evidence. *Teaching and Teacher Education*, 145, 104712.
- Pat-El, R. J., Tillema, H., & Van Koppen, S. W. M. (2024). Student perceptions of formative assessment as supportive of motivation and engagement. *Educational Research Review*, 42, 100567.
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860.
- Shao, Y. (2025). Developing teacher assessment literacy: A longitudinal study of two novice teachers’ trajectories. *Assessment in Education: Principles, Policy & Practice*, 32(1), 88–106.
- Tan, L. (2025). Generative AI in formative assessment design: Opportunities and challenges from the Singapore Assessment Symposium 2025. *Educational Technology & Society*, 28(2), 156–170.
- Vijayakumaran, P., Chandrasena, W. D., & Liyanage, P. (2023). Satisfaction of basic psychological needs and teaching-learning process of physics in junior secondary classes in Jaffna District, Sri Lanka. *Asian Journal of Education and Social Studies*, 42(4), 78–89.
- Yilmaz Soyly, M., Kaya, E., & Yildirim, S. (2025). Gamified formative assessment and student motivation: A self-determination theory perspective. *Computers & Education*, 215, 105045.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
- Zhang, H., Quan, J., Zhang, N., & Zhang, L. (2025). Investigating the effects of formative assessment on EFL students’ achievement and motivation: A Self-Determination Theory perspective. *Frontiers in Psychology*, 16, 1664871.

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