# Self-Regulated Learning and Academic Achievement in Higher Secondary Education: A Conceptual Reflection in the Context of Nep 2020

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## ABSTRACT

Academic achievement in higher secondary education is frequently conceptualised in terms of examination outcomes. Contemporary educational theory, however, recognises that achievement is fundamentally linked to the learner's capacity to plan, monitor, evaluate, and regulate their own learning processes. Within this framework, Self-Regulated Learning has emerged as a significant construct, empowering students to engage actively in their educational experiences rather than remain passive recipients of instruction. The National Education Policy 2020 underscores the importance of learner-centred, competency-based, experiential, holistic, and flexible education. These priorities are closely aligned with Self-Regulated Learning, as both emphasise goal-setting, independent learning, critical thinking, self-assessment, reflective practice, and lifelong learning.

This conceptual paper analyses the relevance of Self-Regulated Learning as a pathway to Academic Achievement in Higher Secondary Education within the framework of NEP 2020. It explores how self-regulated learners establish academic goals, manage time, employ effective learning strategies, monitor progress, seek feedback, and adjust ineffective approaches. These competencies are particularly critical at the higher secondary level, where students encounter academic pressure, career decisions, competitive examinations, and increased responsibility for independent learning. The paper further examines the roles of teachers, curriculum practices, formative assessment, academic counselling, and classroom climate in fostering Self-Regulated Learning. It contends that enhancing Self-Regulated Learning can facilitate not only improved academic outcomes but also greater learner autonomy, confidence, resilience, and preparedness for future learning. Integrating Self-Regulated Learning into higher secondary classrooms is therefore positioned as a meaningful contribution to the educational vision articulated in NEP 2020.

**Keywords:** Self-Regulated Learning, Academic Achievement, Higher Secondary Education, NEP 2020, Learner-Centred Education, Competency-Based Learning.

## INTRODUCTION

Education in the contemporary world is undergoing major transformation. The focus of learning is gradually shifting from the mere transmission of information to the development of competencies, values, skills, attitudes, and lifelong learning capacities. In this changing context, Academic Achievement cannot be understood only as the result of memory, examination preparation, or classroom instruction. It is likewise shaped by the learner's ability to regulate learning behaviour, manage time, apply suitable strategies, monitor progress, and improve performance through reflection and feedback.

Self-regulated learning is a foundational concept in educational psychology that elucidates how learners become active agents in their academic development. (McCombs & Marzano, 1990, pp. 51-69) This process

involves students setting goals, selecting strategies, monitoring their learning, regulating motivation and emotions, evaluating outcomes, and adjusting their approaches as necessary. Self-regulated learners move beyond reliance on external instruction, cultivating the capacity for independent learning. Such learners are more likely to exhibit independence, adaptability, and responsibility in their academic pursuits.

Self-regulated learning is particularly relevant in higher secondary education. At this stage, students transition from guided instruction to more independent and future-oriented educational experiences. They face rigorous curricula, public examinations, entrance assessments, career decisions, peer pressure, family expectations, and the emotional changes associated with adolescence. Addressing these challenges necessitates not only subject knowledge but also the development of planning skills, self-discipline, persistence, confidence, reflective thinking, and adaptive learning strategies.

The National Education Policy 2020 offers a comprehensive framework for analysing self-regulated learning. NEP 2020 emphasises holistic, flexible, multidisciplinary, learner-centred, and competency-based education. It further prioritises critical thinking, conceptual understanding, formative assessment, and preparation for lifelong learning. These objectives are closely aligned with the principles of self-regulated learning. Therefore, a conceptual analysis of self-regulated learning and academic achievement in higher secondary education is both timely and pertinent.

## NEP 2020 and the Need for Self-Regulated Learners

The National Education Policy 2020 marks a major shift in the vision of Indian education. It moves beyond a narrow examination-oriented approach and emphasises holistic development, competency-based learning, critical thinking, creativity, flexibility, and lifelong learning. The policy also stresses the need to reduce rote memorisation and promote understanding, application, inquiry, and reflection. In this context, students are expected to become active learners who can engage meaningfully with knowledge rather than passively reproduce information.

Self-regulated learning directly supports this educational vision. A student who practices self-regulated learning sets clear goals, plans learning activities, selects appropriate strategies, monitors understanding, seeks feedback, evaluates progress, and modifies ineffective methods. These capacities are essential for competency-based and learner-centred education. If NEP 2020 seeks to prepare students for a rapidly changing world, self-regulated learning emerges as a critical learning capacity.

At the higher secondary level, this connection is especially important. Students at this stage prepare for higher education, employment pathways, competitive examinations, and life decisions. They are expected to study independently, manage multiple subjects, use digital resources, and make informed choices regarding future careers. In such a context, learning cannot remain teacher-dependent alone. Students must gradually develop the ability to take responsibility for their own learning.

NEP 2020 also emphasises formative assessment and continuous feedback. This focus is closely related to self-regulated learning, as formative assessment enables students to understand their current standing, recognise achievements, identify remaining challenges, and determine subsequent steps. Consequently, assessment functions not only as a grading tool but also as a mechanism for self-improvement and learning regulation.

## Conceptual Foundations of Self-Regulated Learning

Self-Regulated Learning is a multidimensional process encompassing cognition, metacognition, motivation, behaviour, and emotion. Rather than representing a single study habit or isolated skill, it constitutes a continuous process in which learners direct their academic activities toward meaningful goals.

Zimmerman's social cognitive model explains Self-Regulated Learning as a cyclical process involving three major phases: forethought, performance, and self-reflection. In the forethought phase, students analyse the task, set goals, plan strategies, and develop motivational beliefs. In the performance phase, they apply

strategies, manage attention, monitor progress, and control learning behaviour. In the self-reflection phase, they evaluate outcomes, identify reasons for success or failure, and plan improvements for future learning. (Panadero & Alonso-Tapia, 2014)

Bandura's Social Cognitive Theory also provides an important foundation for Self-Regulated Learning. According to this perspective, learning is shaped by the interaction of personal factors, behaviour, and environment. Students do not develop self-regulation in isolation. Their self-regulatory capacities are influenced by teachers, peers, family, classroom climate, feedback, and learning resources. Therefore, Self-Regulated Learning is both an individual and social process. (Bandura, 1999, pp. 21-41)

Pintrich conceptualised Self-Regulated Learning as a process in which learners regulate cognition, motivation, behaviour, and context. This perspective is particularly relevant in contemporary classrooms, where students must regulate not only what they learn but also how, when, where, and why they learn. Regulation becomes especially critical in digital and blended learning environments. (Schunk, 2005, pp. 85-94)

The principal components of Self-Regulated Learning include goal setting, strategic planning, time management, self-monitoring, self-evaluation, motivation, help-seeking, and adaptation. (Self-Regulated Learning — Cognitive Psychology Reference, n.d.) These elements are directly associated with Academic Achievement, as students who plan and monitor their learning are more likely to identify difficulties early, correct errors, and sustain effort.

**Academic Achievement in Higher Secondary Education**

Academic Achievement generally refers to the level of educational performance attained by students in school subjects or academic tasks. It is commonly measured through marks, grades, test scores, or examination results. In Higher Secondary Education, Academic Achievement is particularly significant because it influences access to higher education, professional courses, scholarships, career opportunities, and social recognition.

However, Academic Achievement should not be understood as a product of intellectual ability alone. It is influenced by several psychological, social, instructional, and environmental factors. Students with similar abilities may perform differently due to differences in motivation, study habits, self-confidence, family support, teacher guidance, emotional stability, and self-regulation. (Xu, 2024)

At the higher secondary level, students frequently encounter significant academic pressure. They are required to manage subject specialisation, board examinations, entrance coaching, future career decisions, and personal development. Students lacking self-regulatory skills may experience confusion, procrastination, examination anxiety, poor time management, and ineffective study habits. Conversely, those with strong Self-Regulated Learning skills are more likely to organise their studies, revise systematically, monitor progress, and enhance performance. (Limone et al., 2020, p. 184)

Therefore, Academic Achievement is determined not solely by teaching and learning content but also by the manner in which students engage with learning tasks. Self-Regulated Learning offers a valuable framework for understanding this engagement.

**Self-Regulated Learning as a Pathway to Academic Achievement**

Self-Regulated Learning contributes to Academic Achievement through multiple pathways. (Ahila & Ambedkar, 2025) First, it enhances goal clarity. Students who establish clear and realistic goals are more likely to organise their learning effectively. Rather than setting vague intentions such as "I will study well," self-regulated learners articulate specific goals, such as completing a chapter, revising a topic, solving a set of problems, or improving performance in a particular subject.

Second, Self-Regulated Learning supports strategic learning. Students differ not only in how much they study but also in how they study. Passive reading and memorisation may not always lead to deeper understanding.

Self-regulated learners use strategies such as summarising, note-making, concept mapping, self-questioning, rehearsal, elaboration, practice testing, and revision. These strategies improve comprehension, retention, and application.

Third, Self-Regulated Learning strengthens time management. Many higher secondary students struggle not because of a lack of ability but because of poor planning and irregular study habits. Time management helps students distribute effort across subjects, avoid last-minute preparation, and balance academic and personal responsibilities.

Fourth, Self-Regulated Learning promotes self-monitoring. Students who monitor their learning can identify whether they have understood a topic or merely completed reading it. They can recognise errors, gaps, and areas requiring clarification. This makes learning more conscious and purposeful.

Fifth, Self-Regulated Learning encourages adaptive help-seeking. Self-regulated learners recognise when to seek assistance from teachers, peers, parents, or learning resources. In this context, help-seeking is regarded as a sign of responsibility rather than weakness.

Sixth, Self-Regulated Learning promotes reflection and adaptation. After receiving marks or feedback, self-regulated learners analyse the reasons for their performance. They ask whether the difficulty was due to lack of preparation, poor strategy, misunderstanding, anxiety, or time mismanagement. Based on this reflection, they modify their future learning. Through these pathways, Self-Regulated Learning serves as a bridge between instruction and achievement. It enables students to transform classroom instruction into personal learning.

**Relevance of Self-Regulated Learning at the Higher Secondary Level**

The higher secondary stage represents a transitional period between school education and higher education. At this stage, students are no longer entirely dependent on teacher direction, yet they are not fully independent adult learners. This transitional nature underscores the importance of cultivating Self-Regulated Learning.

At this level, students enter different streams such as Science, Commerce, and Humanities. Each stream has specific academic demands. Science students may require regular problem-solving, practical understanding, and conceptual clarity. Commerce students may need application-based learning, numerical practice, and conceptual organisation. Humanities students may require reading, interpretation, writing, critical analysis, and argument construction. Across all streams, Self-Regulated Learning helps students adopt appropriate strategies aligned with subject requirements.

Higher secondary students also face career-related anxiety. They are expected to make choices regarding degree programmes, professional courses, entrance examinations, vocational options, and employment pathways. Self-Regulated Learning can help them manage these challenges by developing their planning ability, self-confidence, decision-making, and sense of responsibility.

Significant emotional and social changes characterise adolescence. Peer comparison, parental expectations, fear of failure, social media distractions, and examination stress can all impact academic performance. Self-Regulated Learning helps students manage these pressures through goal orientation, emotion regulation, persistence, and reflective thinking. (Rajagopalan et al., 2022) Consequently, promoting Self-Regulated Learning at the higher secondary level is not only an academic strategy but also a developmental necessity.

**Classroom Practices for Promoting Self-Regulated Learning**

Self-Regulated Learning does not develop spontaneously; it requires intentional support through classroom practices. (Dignath & Veenman, 2020) Teachers play a central role in facilitating the development of self-regulated learners.

One effective strategy is explicit instruction in learning methods. While teachers frequently encourage students to study, revise, or prepare thoroughly, students may lack knowledge of effective techniques. Teachers can

demonstrate how to summarise a paragraph, prepare notes, plan revision, analyse questions, evaluate answers, or correct errors.

Another strategy is structured goal setting. Students may be encouraged to set daily, weekly, and monthly academic goals. Teachers can help them distinguish between general goals and specific goals. For example, "I will improve Mathematics" is a general goal, whereas "I will practise ten problems from quadratic equations before Friday" is a specific goal.

Reflective learning practices are also useful. Learning journals, self-assessment sheets, progress cards, error analysis tasks, and reflection questions can help students think about their own learning. Questions such as "What did I learn?", "Where did I face difficulty?", "What strategy helped me?", and "What should I change next time?" promote metacognitive awareness.

Formative assessment is another powerful method. Regular low-stakes tests, quizzes, assignments, oral responses, peer review, and feedback-based tasks help students monitor progress. When formative assessment is used properly, it does not create fear. Instead, it provides information for improvement.

Teachers can also promote Self-Regulated Learning through feedback. Feedback should not be limited to marks or grades. It should guide students on how to improve. Process-oriented feedback such as "Your answer has relevant points, but you need better organisation" is more useful than simply writing "Good" or "Poor."

Peer learning can further support Self-Regulated Learning. Group discussions, peer teaching, collaborative projects, and shared revision expose students to diverse strategies. However, peer learning should be carefully structured to promote accountability rather than dependency.

**Self-Regulated Learning, Digital Learning, and NEP 2020**

Digital learning has become an important part of contemporary education. (Meena, 2023) Students now use online classes, digital notes, educational videos, learning apps, AI tools, online tests, and virtual resources. NEP 2020 recognises the role of technology in education, but technology becomes meaningful only when students use it responsibly and purposefully.

Self-Regulated Learning is essential within digital learning environments. While digital resources offer flexibility, they also require discipline. Students may have access to numerous resources yet fail to learn effectively due to distraction, inadequate planning, overdependence, or superficial engagement. Consequently, digital learning necessitates attention control, time management, goal setting, and critical evaluation.

AI-supported learning tools can provide personalised feedback, practice questions, explanations, summaries, and study plans. (Kochmar et al., 2020) However, students must be guided to use such tools ethically. They should not simply copy answers or depend on technology for every task. Teachers must help students use digital tools for understanding, practice, revision, and reflection.

In this context, Self-Regulated Learning is a prerequisite for effective digital learning. It enables students to utilise technology as a learning support rather than as a source of distraction. This aligns closely with the NEP 2020 vision of technology-enabled, flexible, and learner-centred education.

**Role of Teachers and Institutions**

Teachers are central agents in fostering Self-Regulated Learning. (Dignath & Veenman, 2021) Students require modelling, guidance, encouragement, feedback, and opportunities for independent practice. Teachers can establish classroom environments that value effort, improvement, reflection, and strategic learning.

Teacher education programmes should include training in Self-Regulated Learning. (Rodriguez-Gomez et al., 2024) Teachers must be equipped to teach study skills, metacognitive strategies, time management, formative assessment, emotional support, and responsible digital learning. Without teacher preparation, Self-Regulated Learning may remain only a theoretical concept.

Institutions also have an important role. (Ruprai & Kaur, 2026) Schools can organise orientation programmes, study-skills workshops, mentoring systems, academic counselling, career guidance, peer-support groups, and parent education programmes. These activities can help students develop academic responsibility.

Institutional assessment practices should also encourage Self-Regulated Learning. If assessment rewards only memorisation and marks, students may not develop reflective learning habits. However, if assessment includes projects, assignments, portfolios, presentations, practical tasks, and self-assessment, students are more likely to become active learners.

Parents should also be involved. At the higher secondary level, parental expectations are often high. Parents can support Self-Regulated Learning by providing encouragement, realistic expectations, study routines, emotional support, and opportunities for independent decision-making.

**Challenges in Promoting Self-Regulated Learning**

Despite the importance of Self-Regulated Learning, several challenges impede its development. A primary challenge is the examination-oriented culture. When the education system places excessive emphasis on marks, students may prioritise short-term memorisation over deep learning and reflection.

Another challenge is a lack of awareness. Many students are not familiar with effective learning strategies. They may spend long hours studying without using productive methods. Similarly, some teachers may value independent learning but may not know how to teach self-regulation systematically.

Large classrooms also make individual guidance difficult. Teachers may not always have enough time to provide personalised feedback, monitor progress, or support students with different learning needs.

Digital distraction constitutes another significant barrier. Mobile phones, social media, gaming, and continuous notifications can undermine concentration and time management. Students require guidance to regulate their digital behaviour.

Emotional factors such as anxiety, fear of failure, low confidence, and peer comparison can also weaken Self-Regulated Learning. Students who repeatedly experience failure may avoid challenging tasks and lose motivation.

Socio-economic disparities can further influence students' capacity for self-regulation. (Kanthy & Arur, 2026, pp. 4-13) While some students benefit from supportive home environments, private resources, and digital access, others may lack study space, guidance, or emotional support. Therefore, efforts to promote Self-Regulated Learning should be closely linked with equity and inclusion.

**Educational Implications**

Self-Regulated Learning has several implications for Higher Secondary Education in the context of NEP 2020. First, teaching should move from teacher-dominated instruction to guided learner participation. Students should be trained to plan, question, monitor, and reflect.

Second, curriculum practices should include learning-to-learn skills. Along with subject content, students should be taught how to organise information, prepare notes, revise systematically, manage time, and evaluate performance.

Third, assessment should support learning improvement. Formative assessment, feedback, self-assessment, peer assessment, and reflective tasks should be integrated into classroom practice.

Fourth, schools should provide academic counselling and mentoring. Many higher secondary students need guidance in goal setting, study planning, stress management, examination preparation, and career decisions.

Fifth, digital literacy should include self-regulation. Students should be trained to use online resources responsibly, verify information, manage screen time, and avoid overdependence on AI tools.

Sixth, teacher education should prepare teachers to promote Self-Regulated Learning. Teachers should be trained in metacognitive instruction, feedback strategies, learner-centred pedagogy, and classroom mentoring.

Finally, Self-Regulated Learning should be regarded as a critical future skill. In a rapidly changing world, students must continue learning beyond formal education. Consequently, the ability to regulate one's own learning is essential for higher education, employment, citizenship, and lifelong development.

## CONCLUSION

Self-Regulated Learning is a vital educational capacity for improving Academic Achievement in higher secondary education. It enables students to become active, strategic, motivated, reflective, and adaptive learners. At the higher secondary level, where students face academic pressure, career choices, emotional changes, and increasing responsibility, Self-Regulated Learning becomes especially important.

The vision of NEP 2020 strengthens the relevance of Self-Regulated Learning. The policy's emphasis on learner-centred education, competency-based learning, critical thinking, formative assessment, flexibility, and lifelong learning is closely aligned with the principles of Self-Regulated Learning. Therefore, promoting Self-Regulated Learning can help translate the ideals of NEP 2020 into classroom practice.

Self-Regulated Learning contributes to Academic Achievement by helping students set goals, manage time, use effective strategies, monitor progress, seek feedback, regulate emotions, and adapt learning methods. However, it requires support from teachers, parents, institutions, curriculum designers, and policymakers.

In conclusion, Self-Regulated Learning should not be regarded merely as a study habit. It represents a pathway to academic success, learner autonomy, resilience, and lifelong learning. Integrating Self-Regulated Learning into Higher Secondary Education can foster not only improved examination performance but also greater responsibility, independence, and future readiness among students.

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