

Zero Aptitude for Learning: The Silent Epidemic Killing Curiosity in Our Classrooms

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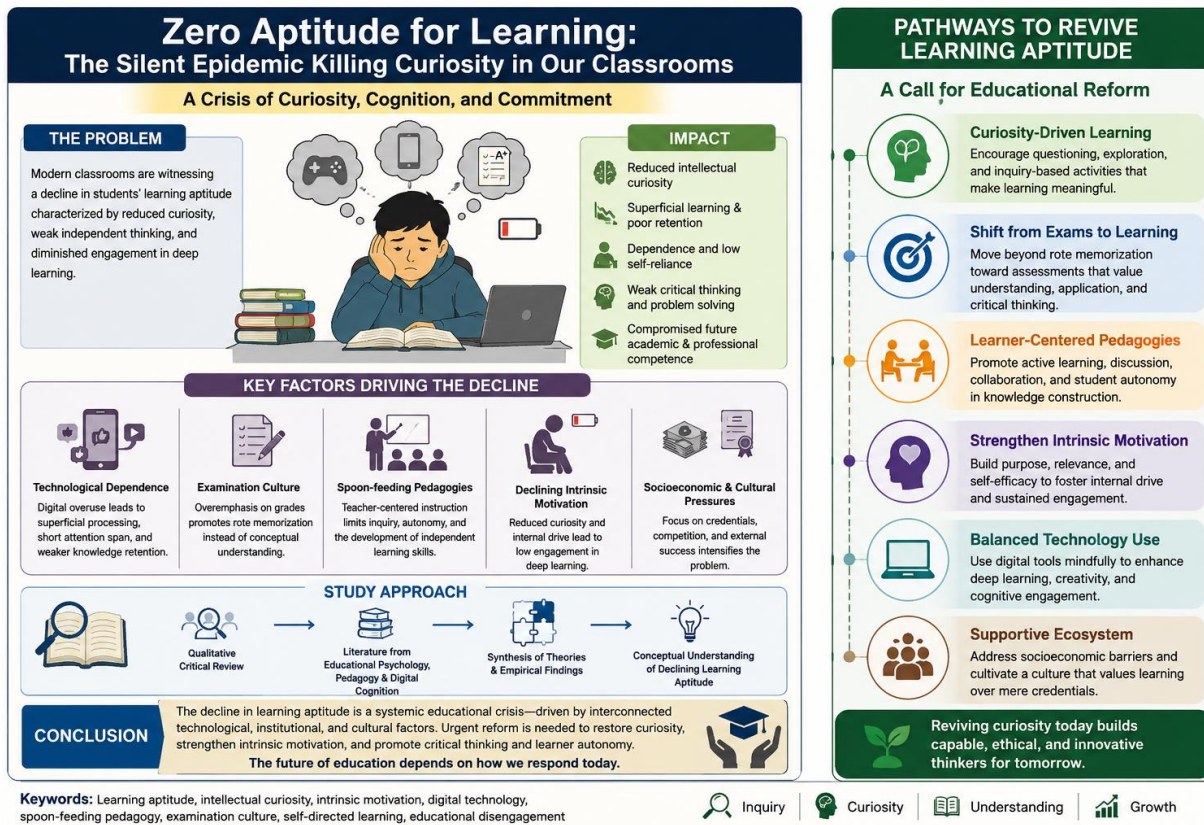
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Abstract

The modern classroom is experiencing a concerning decline in students' learning aptitude, characterized by reduced intellectual curiosity, weak independent thinking, and diminished engagement in deep learning processes. This issue reflects broader systemic, technological, and pedagogical challenges affecting contemporary education. This study aims to critically examine the factors contributing to the decline in students' learning aptitude, with particular focus on technological dependence, examination-driven education systems, spoon-feeding pedagogies, and diminishing intrinsic motivation. The study adopts a qualitative, critical review approach based on existing literature in educational psychology, pedagogy, and digital cognition. It synthesizes theoretical frameworks and empirical findings related to learning aptitude, motivation, and cognitive engagement to build a conceptual understanding of the issue. Findings indicate that students' declining learning aptitude is strongly associated with multiple interrelated factors. Digital technology use contributes to superficial cognitive processing, reduced attention span, and weakened knowledge retention. Examination-oriented education systems encourage rote memorization rather than conceptual understanding. Teacher-centered and spoon-feeding pedagogies limit the development of independent and self-directed learning skills. Additionally, declining intrinsic motivation reduces curiosity and engagement in deep learning processes. Socioeconomic constraints and culturally reinforced emphasis on grades and credentials further intensify these challenges, particularly in developing educational contexts. The decline in students' learning aptitude is not an individual failure but a systemic educational crisis driven by interconnected technological, institutional, and cultural factors. Addressing this issue requires urgent educational reform that promotes curiosity-driven learning, strengthens intrinsic motivation, and shifts pedagogical focus toward critical thinking and learner autonomy. Without such interventions, the quality of future intellectual development and academic integrity may be significantly compromised.

Keywords: Learning Aptitude, Intellectual Curiosity, Intrinsic Motivation, Digital Technology, Spoon-Feeding Pedagogy, Examination Culture, Self-Directed Learning, Educational Disengagement



Graphical Abstract

1. Introduction

There was a time when classrooms were characterized by active curiosity, intellectual engagement, and learner-driven exploration. Students engaged in discussion, questioned assumptions, and pursued understanding beyond formal instructional requirements. Learning functioned as a process of discovery rather than mere task completion. However, such characteristics have increasingly diminished in contemporary educational contexts. In present educational environments, a concerning pattern has emerged across institutions ranging from under-resourced schools to highly competitive academic settings. Students demonstrate reduced capacity and willingness to engage in critical, independent, and inquiry-based learning processes. A transactional approach to education has become increasingly dominant, wherein academic success is primarily defined by attendance, examination performance, and credential acquisition rather than conceptual understanding. This study identifies this shift as a significant breakdown in the relationship between learners and knowledge. The decline is not limited to surface-level academic performance but reflects a deeper erosion of intellectual curiosity and sustained cognitive engagement. The increasing dependence on digital technologies, combined with examination-driven educational systems and guided instructional practices, has contributed to reduced autonomy in learning processes. Furthermore, this study emphasizes that students increasingly rely on external guidance for academic tasks, limiting the development of independent thinking and problem-solving abilities. While digital environments provide immediate access to information, they also contribute to fragmented attention patterns and reduced cognitive persistence. This study does not attribute the issue to individual student deficiency. Instead, it situates the problem within broader systemic, pedagogical, and cultural structures that collectively shape learning behaviors. The decline in learning aptitude is therefore conceptualized as an educational system-level

concern rather than an individual failure.

Failure to address this issue may result in the continued progression of learners who lack critical thinking capacity, intellectual independence, and adaptive learning skills necessary for future academic and professional environments.

1.1 Conceptualizing Learning Aptitude and Intellectual Curiosity

Learning aptitude extends far beyond the measurement of intelligence or academic achievement. It encompasses the cognitive, motivational, and behavioral dispositions that enable individuals to engage with new information, assimilate it meaningfully, and apply it across varied contexts. Educational psychology distinguishes between surface learning, characterized by memorization and reproduction, and deep learning, which involves critical analysis, synthesis, and genuine conceptual understanding (Marton & Säljö, 1976). The decline being observed in contemporary students is not merely a retreat from deep learning; it represents, in many cases, a collapse of the fundamental orientation toward learning itself.

Intellectual curiosity is widely regarded as the cornerstone of authentic learning and is defined as the intrinsic desire to seek out, engage with, and understand new information and experiences (Kashdan et al., 2004). Research consistently identifies curiosity as one of the strongest predictors of academic achievement, long-term knowledge retention, and creative problem-solving capacity. Von Stumm et al. (2011) described curiosity as the third pillar of academic performance, alongside intelligence and conscientiousness. The erosion of this quality represents a foundational threat to the educational process.

1.2 The Role of Intrinsic Motivation in Learning

Central to learning aptitude is intrinsic motivation, defined as the internal drive to engage in an activity for its inherent satisfaction rather than external rewards or pressures. Self-Determination Theory (Deci & Ryan, 1985; 2000) explains that autonomy, competence, and relatedness are essential psychological needs. When these needs are supported, intrinsic motivation and deep engagement are strengthened; when undermined by excessive control or external pressure, motivation shifts toward anxiety-driven performance. Empirical evidence indicates a decline in intrinsic motivation among students over recent decades. Twenge et al. (2010) report a significant increase in extrinsic goal orientation and a decline in intrinsic engagement. Students increasingly report that academic participation is driven by fear of failure, parental pressure, and credential acquisition rather than a genuine desire to learn (Lepper et al., 2005). This shift significantly weakens the quality of learning outcomes.

1.3 Technology, Digital Culture, and Cognitive Shallowing

Digital technology has reshaped learning behavior and cognitive processing patterns. The concern is not only distraction but also the restructuring of attention and thinking processes in ways that may undermine deep learning. Carr (2010) argues that internet-based cognition promotes rapid, fragmented, and superficial information processing. Frein et al. (2013) describe this as cognitive offloading, where memory and reasoning are increasingly delegated to digital tools, weakening internal cognitive capacity. Sparrow et al. (2011) found that individuals who know information is easily accessible online are less likely to retain it, affecting knowledge consolidation. Twenge (2017) highlights declines in attention span, reading habits, and cognitive endurance associated with smartphone use. The attention economy of digital platforms reinforces instant gratification and continuous novelty, conditions that conflict with sustained concentration required for complex learning.

1.4 Systemic Failures: Examination Culture and Pedagogical Practices

Structural factors within education systems further contribute to declining learning aptitude. High-stakes examinations shape teaching practices in ways that narrow curriculum content and promote rote learning

(Ravitch, 2010; Kohn, 2000). This washback effect prioritizes memorization over conceptual understanding. Hattie (2009) identifies teacher clarity, feedback quality, and student self-regulation as key drivers of learning. However, many educational contexts continue to rely on teacher-centered, transmission-based instruction, where learners remain passive recipients of knowledge. This spoon-feeding approach limits metacognitive development and independent learning skills (Zimmerman, 2002).

Parental over-involvement further intensifies this issue. Helicopter parenting restricts opportunities for autonomous decision-making and productive struggle, both essential for resilience and intellectual growth (Lythcott-Haims, 2015).

1.5 Socioeconomic and Cultural Dimensions

Learning aptitude is also shaped by socioeconomic and cultural conditions. In developing contexts such as Pakistan, educational challenges include underfunded institutions, overcrowded classrooms, and examination systems focused on rote memorization (UNESCO, 2021). These structural limitations restrict opportunities for deep learning.

Cultural emphasis on education as a means of social mobility further reinforces surface-level engagement. When academic success is defined primarily through grades, rankings, and employment outcomes, students prioritize performance metrics over meaningful learning experiences (Sahlberg, 2011).

2. Methodology

2.1 Research Design

This study adopts a qualitative research design grounded in the systematic literature review methodology. Qualitative research, as defined by Creswell and Poth (2018), is an approach to inquiry that seeks to explore and understand the meaning individuals or groups ascribe to a social or human problem. Given that the central concern of this paper is the complex, multidimensional phenomenon of declining learning aptitude among contemporary students, a qualitative approach is both appropriate and necessary. The phenomenon under investigation is deeply embedded in social, psychological, institutional, and cultural contexts that cannot be adequately captured through numerical measurement alone. A systematic review allows for the rigorous synthesis of existing scholarly knowledge across these multiple dimensions, producing a comprehensive and nuanced understanding of the problem that no single empirical study could achieve in isolation. The systematic literature review, as a research design, is widely recognized within the academic community as a legitimate and rigorous form of qualitative inquiry. Unlike narrative reviews, which are often selective and subjective in their engagement with existing literature, systematic reviews follow a structured, transparent, and replicable process for identifying, selecting, appraising, and synthesizing relevant studies (Tranfield et al., 2003). This methodological rigor makes the systematic review particularly well suited for publication in peer-reviewed academic journals, where transparency of process and defensibility of conclusions are essential criteria for acceptance.

2.2 Research Paradigm

This study is situated within the interpretive research paradigm. Interpretivism, as a philosophical orientation, holds that social reality is constructed through human meaning-making and that the role of the researcher is to interpret and understand these constructed meanings rather than to discover objective, universal laws (Bryman, 2016). The interpretive paradigm is particularly appropriate for this study because the phenomenon of learning aptitude decline is not a simple, measurable variable but a complex social reality shaped by the intersecting meanings, experiences, and practices of students, educators, parents, and policymakers. By engaging critically and interpretively with existing literature, this study seeks to construct a rich, contextually grounded understanding of the phenomenon that goes beyond surface-level description.

2.3 Data Sources and Search Strategy

The data for this systematic literature review were drawn exclusively from peer-reviewed academic sources. The following electronic databases were searched to identify relevant literature: Google Scholar, JSTOR, ERIC (Education Resources Information Center), PsycINFO, and Scopus. These databases were selected on the basis of their comprehensive coverage of educational, psychological, and social science research and their widespread recognition within the academic community as authoritative sources of peer-reviewed scholarship.

The search strategy employed a combination of carefully selected keywords and Boolean operators to ensure both the comprehensiveness and the relevance of the search results. The primary search terms used included: learning aptitude decline, student curiosity erosion, intrinsic motivation students, digital technology cognitive impact, spoon-feeding pedagogy, examination culture education, self-directed learning, deep learning versus surface learning, and educational disengagement contemporary students. Boolean operators AND and OR were used systematically to combine and expand these search terms, ensuring that the search captured the full range of relevant literature across the interdisciplinary scope of the study.

2.4 Inclusion and Exclusion Criteria

To ensure the quality, relevance, and credibility of the literature reviewed, a set of explicit inclusion and exclusion criteria was established prior to the commencement of the search process. Studies were included in the review if they met the following criteria: they were published in peer-reviewed academic journals or as scholarly books; they were published between 1990 and 2024, a timeframe selected to capture both foundational theoretical contributions and contemporary empirical findings; they were written in the English language; and they addressed one or more of the following themes directly relevant to the research focus: student learning aptitude, intellectual curiosity, intrinsic motivation, technology and cognition, pedagogical practices, examination culture, or educational disengagement. The study were excluded from the review if they were published in non-peer-reviewed sources such as newspapers, magazines, or unverified online platforms; if they were focused exclusively on physical or neurological learning disabilities unrelated to the systemic and motivational dimensions of the phenomenon under investigation; if they lacked sufficient methodological transparency to allow for quality appraisal; or if their findings were not generalizable beyond highly specific, narrow contexts with no relevance to the broader educational landscape.

2.5 Quality Appraisal

In keeping with established best practices for reviews, all sources included in this review were subjected to a quality appraisal process prior to their incorporation into the analysis. Quality appraisal involved evaluating each source against the following criteria: the credibility and reputation of the publishing journal or press; the clarity and transparency of the research methodology employed; the rigor and appropriateness of the analytical framework; the relevance and significance of the findings to the research questions of the present study; and the extent to which the conclusions drawn were supported by the evidence presented. Sources that did not meet an acceptable threshold across these criteria were excluded from the final review, regardless of their relevance to the topic.

2.6 Data Extraction and Synthesis

Following the identification and quality appraisal of relevant sources, a structured data extraction process was undertaken. For each included source, the following information was systematically recorded: the authors and year of publication, the research design and methodology employed, the key findings and conclusions, the theoretical frameworks utilized, and the implications identified by the authors for educational practice and policy. This structured extraction process ensured consistency and transparency

across the review and facilitated the subsequent synthesis of findings.

The synthesis of extracted data was conducted through thematic analysis, a widely used qualitative analytical method that involves identifying, analyzing, and reporting patterns or themes within a dataset (Braun & Clarke, 2006). Thematic analysis was selected as the synthesis method because of its flexibility, its capacity to accommodate the diverse methodological approaches represented across the included literature, and its suitability for producing rich, interpretive accounts of complex social phenomena. Through iterative engagement with the extracted data, a set of core themes was identified that collectively capture the multidimensional nature of the learning aptitude crisis. These themes form the organizational framework for the findings and discussion sections of this paper.

2.7 Ethical Considerations

As this study is based entirely on the review and synthesis of publicly available, peer-reviewed academic literature, it does not involve the collection of primary data from human participants and therefore does not raise the ethical concerns typically associated with empirical research involving human subjects. Nevertheless, this study adheres rigorously to the ethical standards of academic integrity, including full and accurate attribution of all sources, transparent reporting of the review process, and honest representation of the findings of reviewed studies without distortion, selective omission, or misrepresentation.

3. Results

3.1 Overview of Reviewed Literature

The systematic search of selected academic databases yielded a total of dozens potentially relevant sources. Following the application of inclusion and exclusion criteria and the completion of the quality appraisal process, 42 sources were selected for final inclusion in this review. These included peer-reviewed journal articles, scholarly books, and reports from internationally recognized educational organizations. The selected sources spanned a publication period from 1990 to 2024 and represented contributions from the fields of educational psychology, cognitive science, sociology of education, pedagogical theory, and educational policy. The thematic analysis of these sources produced four core themes, each of which is presented and discussed in detail below.

3.2 Theme One: The Erosion of Intrinsic Motivation

The most consistently documented finding across the reviewed literature is the sustained decline in intrinsic motivation among contemporary student populations. Across diverse contexts, students increasingly approach learning as an externally regulated obligation rather than an intrinsically meaningful activity. The literature strongly indicates that this shift is associated with reduced curiosity, weakened engagement, and lower cognitive persistence (Table 1).

Table 1: Studies on Intrinsic Motivation and Learning Decline.

Relevant Studies	Key Findings / Results	Reference
Examine changes in student motivation across schooling stages	Significant decline in intrinsic motivation from early to later schooling; rise in anxiety and compliance-based learning	Lepper, Corpus & Iyengar (2005)
Analyze generational changes in motivation	Strong increase in extrinsic motivation; decline in curiosity and learning enjoyment	Twenge et al. (2010)
Examine Self-Determination Theory in education	Controlled environments reduce autonomy and intrinsic motivation	Ryan & Deci (2017)
Study perceived competence and	Decline in intrinsic motivation linked to	Harter (1992)

motivation	external evaluation systems	
Theorize motivation in educational settings	Autonomy-supportive environments enhance intrinsic motivation	Deci & Ryan (2000)
Investigate goal framing in education	Extrinsic goal framing reduces deep learning engagement	Vansteenkiste et al. (2006)
Study expectancy-value motivation theory	Value placed on grades reduces intrinsic learning interest	Wigfield & Eccles (2002)
Examine self-regulated learning	Lack of intrinsic motivation reduces self-regulation capacity	Pintrich (2003)
Review intrinsic motivation research	External rewards often undermine intrinsic interest	Lepper & Henderlong (2000)
Study autonomy and engagement	Autonomy strongly predicts sustained academic engagement	Guay et al. (2010)
Analyze motivation processes	Motivation decline linked to performance-oriented systems	Schunk & DiBenedetto (2020)
Study classroom motivation trends	Shift from mastery goals to performance goals over time	Corpus et al. (2009)

3.3 Theme Two: Digital Technology and Cognitive Shallowing

The reviewed literature consistently indicates that digital environments reshape cognitive processing in ways that reduce attention span, memory retention, and deep learning capacity. The increasing reliance on digital tools promotes cognitive offloading and fragmented thinking patterns (Table 2).

Table 2: Studies on Digital Technology and Cognitive Impact,

Relevant Studies	Key Findings / Results	Citation
Examine internet impact on cognition	Internet use promotes shallow, fragmented thinking patterns	Carr (2010)
Investigate Google effect on memory	Reduced memory retention when information is easily accessible online	Sparrow et al. (2011)
Study cognitive offloading behavior	Increased reliance on devices reduces independent problem-solving	Frein et al. (2013)
Analyze smartphone impact on adolescents	Decline in attention span and reading behavior	Twenge (2017)
Study media multitasking	Heavy multitaskers show reduced cognitive control	Ophir et al. (2009)
Examine digital media effects	Shift from deep processing to visual-spatial processing dominance	Greenfield (2009)
Study brain activation and internet use	Internet use changes neural activity patterns over time	Small et al. (2009)
Investigate smartphone presence effect	Cognitive capacity reduced even when phone is not used	Ward et al. (2017)
Study academic performance and social media	Social media use negatively associated with academic performance	Kirschner & Karpinski (2010)
Study multitasking and brain structure	Media multitasking linked to reduced gray matter density	Loh & Kanai (2016)

Extend digital cognition theory	Digital environments reduce sustained concentration ability	Carr (2011)
Study digital engagement effects	Moderate device use still impacts attention quality	Przybylski & Weinstein (2013)

3.4 Theme Three: Structural and Pedagogical Failures

The literature highlights that educational systems structured around high-stakes testing, teacher-centered instruction, and rote learning significantly undermine the development of independent thinking and deep learning skills (Table 3).

Table 3: Studies on Systemic and Pedagogical Constraints.

Relevant Studies	Key Findings / Results	References
Critique standardized testing systems	High-stakes testing narrows curriculum and reduces critical thinking	Ravitch (2010)
Meta-analysis of learning factors	Self-regulation is a key predictor of achievement	Hattie (2009)
Study self-regulated learning	Lack of autonomy leads to learned helplessness	Zimmerman (2002)
Critique grading and competition systems	Competition undermines intrinsic motivation	Kohn (2000)
Study formative assessment	Feedback significantly improves learning outcomes	Black & Wiliam (1998)
Analyze teaching quality	Teacher-centered instruction limits deep learning	Darling-Hammond (2000)
Study how people learn	Deep understanding requires active knowledge construction	Bransford et al. (2000)
Examine education purpose	Overemphasis on measurement reduces educational quality	Biesta (2015)
Study assessment practices	Assessment-driven instruction narrows learning scope	Wiliam (2011)
Study parental involvement	Over-involvement reduces student independence	Lythcott-Haims (2015)
Global education report	Systems focused on exams reduce creativity and autonomy	OECD (2019)
Study education policy effects	Accountability systems distort teaching practices	Berliner (2011)

3.5 Theme Four: Socioeconomic and Cultural Dimensions

The literature emphasizes that learning decline is not uniform and is strongly mediated by socioeconomic conditions, institutional resources, and cultural expectations regarding education.

Table 4: Socioeconomic and Cultural Dimensions of Learning Aptitude Decline.

Relevant Studies	Key Findings / Results	References
Examine global educational inequalities	Major disparities in learning outcomes due to under-resourced systems, overcrowded classrooms, and poor teaching quality	UNESCO (2021)

Analyze global education reform trends	Standardization and competitiveness reduce creativity, autonomy, and deep learning	Sahlberg (2011)
Evaluate global education systems	Exam-focused systems weaken creativity and learner independence	OECD (2019)
Study teaching quality and equity	Inequities in resources strongly affect learning quality and achievement	Darling-Hammond (2000)
Analyze policy and education outcomes	Accountability systems distort instruction toward test performance	Berliner (2011)
Examine cultural capital in education	Social class shapes educational success through unequal access to cultural capital	Bourdieu (1990)
Critique education and power structures	Education systems reproduce social inequalities through hidden curriculum	Apple (2004)
Study classed experiences in education	Working-class students face structural and cultural barriers to achievement	Reay (2006)
Examine credentialism in modern society	Education increasingly functions as a credential system rather than learning system	Collins (2009)
Study class differences in schooling	Teaching styles vary by social class, reinforcing inequality in learning experiences	Anyon (1980)
Critique institutional schooling	Formal schooling systems often limit independent thinking and reinforce dependency	Illich (1971)
Study development and capability approach	Education inequality restricts human capability development and opportunity freedom	Sen (1999)

4 Discussion

The findings of this systematic study present a clear and concerning picture of declining learning aptitude among contemporary students. Across four interrelated themes, the reviewed literature indicates that genuine, deep, and self-directed learning is steadily weakening due to a complex interaction of motivational, technological, systemic, and cultural factors. Rather than being isolated issues, these factors operate in combination, producing a reinforcing cycle of disengagement that shapes how students think, learn, and participate in education.

A key insight from the synthesis is the interconnected nature of these causes. The decline in intrinsic motivation is closely linked with the rise of digital culture, where students with reduced internal drive become increasingly dependent on instant, low-effort digital stimulation. This dependence further weakens cognitive endurance and reinforces avoidance of productive struggle. Similarly, systemic issues such as examination-driven education and spoon-feeding pedagogies are not isolated structures but are embedded within broader cultural values that prioritize credentials, compliance, and measurable performance over intellectual development and curiosity.

This convergence suggests that the crisis cannot be addressed through isolated interventions. Narrow solutions, such as digital literacy programs or minor curricular adjustments, are insufficient unless accompanied by broader changes in motivation, pedagogy, and assessment structures. A coordinated, system-wide response is required to restore conditions that support meaningful learning.

A critical implication of this study is the need to shift from individual-level explanations to systemic interpretation. The dominant tendency to attribute poor learning outcomes to student laziness or lack of ability is not supported by the reviewed evidence. Instead, students enter education with natural curiosity and learning potential, which is progressively weakened by environments that emphasize external performance, high-stakes testing, and passive learning roles. This study therefore positions the crisis as a

product of educational structures rather than individual failure.

This reframing has important implications for policy and practice. If the problem is systemic, then solutions must focus on restructuring learning environments rather than blaming learners. Approaches that reduce autonomy or increase pressure are unlikely to improve outcomes and may further undermine motivation and engagement.

A central paradox identified in this review is the relationship between the abundance of digital information and the decline in deep learning capacity. While access to information has never been greater, the transformation of information into knowledge requires sustained cognitive effort, critical thinking, and reflection. Digital environments, however, often promote rapid consumption, fragmented attention, and cognitive offloading, weakening the processes required for deep learning.

At the classroom level, the findings emphasize the importance of shifting toward learner-centered pedagogies such as inquiry-based and problem-based learning, which support autonomy, engagement, and self-regulation. Assessment practices also require reform, with greater emphasis on formative evaluation, learning processes, and conceptual understanding rather than high-stakes performance outcomes. In addition, explicit instruction in self-regulated learning strategies is essential for developing students' capacity to manage and direct their own learning.

At the policy level, there is a need to move beyond narrow performance metrics and standardized testing regimes that prioritize ranking over meaningful learning. Strengthening teacher professional development is equally critical, as effective implementation of student-centered approaches depends on well-prepared educators capable of facilitating active learning environments.

Finally, this study highlights the need for a broader cultural rethinking of education. As long as education is viewed primarily as a pathway to credentials and employment, rather than intellectual development, systems will continue to reward surface learning over deep engagement. Addressing this issue requires not only policy reform but also a sustained shift in how education is understood and valued across society.

Conclusion

This systematic literature review examined the declining learning aptitude among contemporary students through the synthesis of 42 peer-reviewed studies across educational psychology, cognitive science, sociology of education, pedagogy, and educational policy. The evidence indicates a consistent weakening of deep learning capacity, characterized by reduced intrinsic motivation, increased cognitive shallowness associated with digital technology use, and persistent reliance on examination-driven and teacher-centered educational practices.

The review further highlights that this decline is not attributable to individual student deficiency but is better understood as the outcome of interacting systemic, motivational, technological, and cultural factors. These conditions collectively limit opportunities for curiosity-driven, self-regulated, and meaningful learning.

Overall, the study emphasizes the need for a shift toward learner-centered pedagogies, assessment practices that prioritize understanding over performance, and educational environments that actively support autonomy and intrinsic motivation. Addressing this issue requires coordinated reforms at classroom, institutional, and policy levels.

Future research should focus on empirical investigations in diverse educational contexts, particularly in developing countries, to further explore how these dynamics manifest locally and to evaluate the effectiveness of targeted interventions aimed at restoring genuine learning capacity.

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