

Teaching in the Age of Technology: A Call for Human-Centred Learning

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Cite: Maleshkova, D. (2026). Teaching in the age of technology: a call for human-centred learning. Cryst J Appl Sci. 2(1), 01-04.

Received: April 10, 2026; **Accepted:** April 16, 2026; **Published:** April 23, 2026

Abstract

As artificial intelligence continues to transform educational landscapes, the need for approaches that preserve the human essence of learning becomes increasingly urgent. This article argues that while digital tools offer efficiency and personalization, they cannot replicate the emotional, aesthetic, and relational dimensions that foster curiosity, joy, and self-actualization. Building upon theoretical frameworks from humanistic psychology, embodied cognition, and positive psychology, the text explores the foundations and principles of human-centred learning. Suggestopedia is presented as a compelling, evidence-informed methodology that integrates cognitive, emotional, and sensory experiences, offering a model for the digital age. Rather than positioning technology and humanistic pedagogy in opposition, the article proposes a vision in which digital innovation elevates – rather than eclipses – the human spirit in education.

Keywords

Human-Centred Learning, Suggestopedia, Digital Education, Embodied Cognition, Holistic Learning, Ai In Education, Positive Psychology

Introduction

Whether hailed as a revolution or lamented as a disruption, technological transformation is reshaping every sphere of human life. Education, traditionally slow to change, now finds itself at the epicentre of this shift. The rise of artificial intelligence and algorithmic tools compels educators to ask: What is the purpose of education? What kind of human beings are we cultivating? Are we building efficient data processors, or are we cultivating curious, creative and whole human beings? These questions, once abstract, now acquire urgent practical implications [1].

This article takes up that challenge – it argues that it is not a choice of one or the other, but we must use technology to serve a deeply human vision of education. We need to return to a holistic, human-centred vision of learning – one that integrates cognitive, emotional, and sensory dimensions and resists the reduction of education to algorithmic processes.

In an era dominated by digital tools, the challenge is not to reject technology, but to design learning ecosystems where humanistic principles remain central. We should bear in mind that true education is not about managing data flows but about cultivating flourishing human beings. Therefore, rather than uncritically

adopting AI, the most pressing task for contemporary educators is to consciously design learning ecosystems where technology serves humanistic ends, not the other way around.

A longstanding Conflict

The tension between mechanistic efficiency and human-centred development is not new – it has deep historical roots. In the twelfth century, Peter Abelard championed a classroom animated by questions, critical dialogue, and the courageous use of reason, while Bernard of Clairvaux upheld an ideal of learning grounded in reverent silence and spiritual obedience. Their dispute exposed two divergent portraits of the learner: one as a thinking, choosing participant in the search for truth, the other as a humble recipient shaped through submission and devotion. Later, Enlightenment figures such as Descartes stressed rational method, while Rousseau championed the natural development of the child. Across these eras, educators grappled with the balance between systematic instruction and attention to the learner as a whole human being – a debate that continues today in the context of digital technologies and AI.

The contemporary concept of human-centred learning echoes this long tradition. Borrowed initially from fields such as de-

sign and engineering, where it ensured that tools serve human needs, it now describes pedagogical approaches that foreground emotional safety, agency, creativity, and wellbeing [2, 3]. Human-centred learning, then, is both a continuation of centuries of thought and a response to the present challenge: maintaining the human at the heart of education amid rapid technological change, ensuring that digital tools serve as enablers rather than replacements for relational, ethical, and aesthetic dimensions of learning.

The Promise and Peril of AI in Education

As artificial intelligence enters classrooms, the danger grows that education will again drift toward the mechanical.

Artificial intelligence and digital tools promise unprecedented opportunities for personalization, efficiency, and scalability in education. Adaptive platforms can tailor instruction to individual learning speeds, provide instant feedback, and help educators manage large datasets of student performance. These technologies can enhance access and ensure that content aligns with learner needs, offering clear, practical benefits.

Yet, alongside these advantages lie significant risks. Mechanistic systems, if unchecked, can reduce learning to measurable outputs, neglecting the affective, social and embodied dimensions which are essential for deep engagement. Without intentional attention to emotional and relational factors, learners may experience isolation, disengagement, or superficial comprehension. The allure of technological optimization must therefore be balanced with awareness of what is fundamentally human in the learning process. The peril is not the technology itself, but its potential to enact a hidden curriculum that values only what is quantifiable, thereby eroding the relational, ethical, and aesthetic foundations of education [4]. Because, while AI can optimize instruction, grade assignments, and personalize pacing, it cannot replicate joy, wonder, or the sense of belonging that comes from shared human experience – qualities consistently identified as central to meaningful learning [5, 6].

Foundations of Human-Centred Learning

- Human-centred learning is built upon the integration of cognitive, emotional, and sensory dimensions, acknowledging that knowledge takes root only when the whole person is involved. Educational psychology offers several theoretical underpinnings that illuminate why this integrated approach remains essential even in an era of rapid digital acceleration.
- Humanistic Psychology emphasizes the need for emotional safety, self-actualization, and authenticity, placing the learner's lived experience at the centre of the educational process. In a world increasingly shaped by algorithms and data-driven metrics, Rogers' insight reminds us that genuine growth cannot occur without trust, empathy, and meaningful human connection [6].
- Embodied Cognition highlights the interplay between body, movement, and sensory experience in shaping understanding. It suggests that learning is not a disembodied process of information transfer but a dynamic, multisensory encounter with the world – an insight that challenges the often static, screen-bound nature of digital education. [7-9].
- Positive Psychology focuses on well-being, flow, joy and a sense of purpose as essential components of learning. These dimensions are crucial for sustaining attention and nurtur-

ing intrinsic motivation, especially at a time when students are overwhelmed by information yet increasingly emotionally fatigued [3, 10].

Without attention to these interconnected dimensions, even technologically advanced learning environments risk producing students who are cognitively proficient but emotionally disengaged, sensorially under-stimulated, and disconnected from their own curiosity. Human-centred pedagogy thus emerges not as a romantic ideal but as a developmental necessity – one that nurtures the whole human being and preserves the deeply human textures of learning. Future education must therefore prioritize human flourishing alongside measurable achievement.

Principles of Human-Centred Approaches

Human-centred approaches share several guiding principles that collectively transform learning from a mechanical task into a meaningful, life-shaping experience

- **Learner agency:** Students are active participants who co-construct knowledge rather than passively receiving it. Their choices, questions, and interpretations matter; they become authors of their own learning narratives, not merely consumers of predetermined content [6].
- **Emotional safety and support:** Psychological comfort and encouragement create the conditions for exploration, risk-taking, and creativity. When learners feel valued and supported, they dare to experiment, make mistakes, and engage with complexity – skills increasingly vital in the unpredictable digital future [10].
- **Embodied engagement:** Multisensory activities such as movement, music, role-play, and vivid imagery enhance memory, deepen conceptual understanding, and sustain intrinsic motivation. This principle stands in contrast to the sedentary, visually overloaded patterns of digital learning and reminds us that the body is an indispensable partner in cognition [8, 9].
- **Joy and aesthetic richness:** Experiences of wonder, beauty, humour, and flow anchor learning in positive emotion. Such moments do not only make lessons enjoyable – they create long-lasting neural pathways, strengthen curiosity, and elevate the learning experience beyond mere task completion [3].

Together, these principles ensure that learning is not only effective but also transformative. They form the conceptual foundation upon which Suggestopedia builds – an approach that harnesses multisensory richness, emotional depth, and a profound respect for the human person to create environments where students thrive academically and flourish as individuals.

Case in Point: Suggestopedia

If the human-centred paradigm provides the theoretical foundation, Suggestopedia offers a living illustration of its principles in practice. Developed by the Bulgarian psychiatrist and educator Georgi Lozanov in the 1970s, Suggestopedia was conceived as a method to unlock the vast reserves of human potential for learning. Far from a mechanistic approach, it embodies joy, beauty, and trust as essential conditions for meaningful education.

Although developed decades before AI, Suggestopedia anticipates many needs of today's learners. Its integration of music, narrative, relaxation, and aesthetic immersion aligns with find-

ings from positive psychology, neuroeducation, and embodied cognition [11, 12].

From a humanistic perspective, it cultivates an atmosphere of safety and encouragement, where learners feel liberated from fear of failure and are invited to explore. The teacher assumes the role of a facilitator, guide, and even co-creator of meaning, rather than a mere transmitter of information [13] – a role which is highly relevant at a time when information is extremely accessible and therefore teachers are no longer needed as a major source of it.

The method also resonates strongly with embodied cognition. Music, movement, and multisensory input are central to the suggestopedic classroom. Learners engage not only intellectually but also physically and emotionally: they sing, role-play, and inhabit imaginative scenarios that expand both memory and creativity [11, 14]. This integration of body and mind exemplifies how sensory richness deepens learning.

Finally, Suggestopedia captures the spirit of positive psychology. The method prioritizes joy, playfulness, and aesthetic experience as intrinsic to the learning process. The carefully designed environment – from the use of classical music to the arrangement of space – is not a superficial embellishment but a deliberate tool to induce relaxation, curiosity, and openness. These conditions align with what Csikszentmihalyi calls “flow”: a state where learners lose themselves in the activity, finding both challenge and delight.

Empirical studies, though fewer than those on mainstream approaches, provide evidence of Suggestopedia’s effectiveness. Research reports accelerated vocabulary acquisition, improved retention rates, and greater learner motivation compared to traditional methods [13, 14]. More importantly, learners consistently describe the experience as transformative, pointing not only to measurable gains but also to a sense of joy, confidence, and expanded self-perception.

In this sense, Suggestopedia is not merely an alternative methodology, but a reminder of what education can be when it places the human – with all their emotions, senses, and aspirations – at the centre. Its relevance today lies precisely in offering a counterpoint to AI-driven mechanization: a pedagogy that celebrates the irreplaceable richness of lived human experience. And though it is mostly popular as a language teaching methodology, in fact it has been acknowledged by UNESCO as “superior teaching method for many subjects and for many types of students, compared with traditional methods” [15].

Contrast – Algorithms vs. Aesthetics

Imagine a classroom dominated by algorithms. Every learner’s path is meticulously tailored: content adapts instantly, pace is optimized, and performance metrics are displayed on glowing screens. The hum of computers and soft clicks of digital feedback fill the space. Efficiency reigns, yet the air feels sterile. Interactions are transactional; collaboration is mediated by data points rather than human curiosity. Learners advance through precisely sequenced tasks, rarely encountering moments of surprise, delight, or shared insight.

Now, step into a classroom inspired by Suggestopedia. Music flows gently, mingling with laughter and whispered curiosity. Sunlight filters through artfully arranged spaces; colours, textures, and objects invite exploration. Learners sing, act, and inhabit imagined scenarios [5, 11], their movements and gestures intertwined with thought and memory. Questions ripple through the room spontaneously, ideas spark in dialogue, and joy accompanies discovery. Here, learning is embodied, social, and aesthetic, each sensation deepening understanding and engagement.

This contrast reveals more than a methodological difference; it exposes two divergent conceptions of education. One envisions the classroom as an arena of data flows, optimized for efficiency and measurable performance. The other conceives of it as a space of human flourishing, where beauty and meaning are not peripheral but essential. To choose exclusively in favour of the former risks producing technically skilled but emotionally impoverished learners. To integrate the latter is to affirm that education, at its core, is about becoming fully human.

The Suggestopedic approach places emphasis not on quantification but on quality of experience. Here, music, imagery, movement, and dialogue serve not as ornamental additions but as central features of the learning environment. The aesthetic dimension – so often marginalized in discussions of educational technology – becomes a vital pathway to deeper engagement, creativity and joy. As Maxine Greene (1995) argued, aesthetic encounters in education open spaces of imagination and possibility, allowing learners to see the world “as if it could be otherwise.” In this sense, aesthetics is not decoration but transformation.

This view is echoed by Gert Biesta (2006), who reminds us that education is not merely about producing outcomes, but about cultivating subjectivity, responsibility, and the capacity to exist in relation to others. While algorithms excel at prediction and control, aesthetics invites learners into spaces of surprise, openness, and transcendence – qualities central to humanistic education.

Conclusion

In an era of rapid technological transformation, education faces a profound challenge: how to integrate the undeniable benefits of AI and algorithmic tools while preserving the human essence of learning. Intelligent systems can analyse patterns, predict needs, and adapt pathways with remarkable precision, yet they cannot replicate the warmth of encouragement, the subtlety of intuition, or the quiet alchemy through which a teacher inspires confidence. As this article has argued, efficiency and personalization – valuable as they are – cannot substitute for the emotional, aesthetic, and relational dimensions that cultivate curiosity, joy, and self-actualization. These deeply human experiences remain the true engines of long-term engagement and meaningful growth.

Drawing upon both historical insight and contemporary reflection, it becomes clear that education has long grappled with the tension between systematic instruction and holistic development. The question is not new; what is new is the magnitude of the technological forces reshaping the landscape, urging us to choose with greater clarity what we wish to preserve. In this context, Suggestopedia stands out as a compelling illustration of a

fully integrated, evidence-grounded methodology: orchestrating music, movement, imagination, and environment into a coherent approach that engages mind, body and senses [11, 13, 15, 16].

Rooted in both scientific insight and artistic sensitivity [11], Suggestopedia offers more than a methodology – it offers a vision. It shows that learning can be both rigorously effective and profoundly enriching, rooted in joy rather than pressure, and shaped by trust rather than fear. As we move further into the digital age, its principles remind us that technology should elevate, not eclipse, the human spirit. The future of education will undoubtedly include AI, adaptive systems, and immersive digital tools; yet their greatest promise will be realised only when they serve an approach that keeps the learner fully human – whole, inspired, and alive to the wonder of discovery.

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