2. Curriculum on AI to be Introduced in all Schools - Economy

Recently, the Ministry of Education announced that an Artificial Intelligence (AI) curriculum would be introduced from Class 3 onwards for the next academic year (2026-27).

Overview

The Department of School Education and Literacy (DoSEL) under the Ministry of Education (MoE) is actively supporting educational institutions like CBSE, NCERT, Kendriya Vidyalaya Sangathan (KVS), and Navodaya Vidyalaya Samiti (NVS), in collaboration with States and Union Territories (UTs). The initiative is aligned with the National Curriculum Framework for School Education (NCF-SE) — a key framework developed under the National Education Policy (NEP) 2020. Its core vision is to develop a meaningful, inclusive, and futuristic curriculum that prepares learners for an AI-augmented world.

Objectives and Core Aim

Curriculum Design - Develop a flexible, interdisciplinary, and inclusive curriculum that integrates AI and Computational Thinking across grade levels.

AI & CT Integration - Reinforce the concepts of learning, thinking, and teaching by embedding Artificial Intelligence and Computational Thinking into mainstream education.

The long-term vision is to expand towards the idea of **"**AI for Public Good" — using AI ethically and responsibly to address societal challenges such as healthcare, environment, and education equity.

Implementation Strategy

1. Teacher Training - Teacher capacity building will be a cornerstone of this initiative. The NISHTHA (National Initiative for School Heads and Teachers Holistic Advancement) platform, along with other specialized training institutions, will deliver grade-specific and time-bound training modules. Emphasis will be placed on -

1. Basic digital and AI literacy.
2. Pedagogical strategies to integrate AI concepts.
3. Ethics, data safety, and responsible use.
4. Continuous professional development to keep up with evolving technologies.

2. Resource Material Development - The NCERT will develop resource materials, teacher handbooks, digital content, and classroom aids. Target completion timeline - December 2025. Materials will emphasize -

1. Conceptual clarity through real-life examples.
2. Interactive digital modules.
3. Multilingual content to ensure inclusivity across states.

3. Institutional Collaboration - A Coordination Committee comprising NCERT and CBSE experts under the NCF-SE framework will oversee - Seamless integration of AI content into school curricula, Structuring, quality assurance, and periodic review, Monitoring implementation progress at national and regional levels.

Arguments in Favour

Building AI Literacy Early - Introducing AI early helps children understand how AI systems work — their capabilities, limitations, and ethical implications. Just as digital literacy became essential in the 21st century, AI literacy will soon be indispensable, enabling future citizens to engage intelligently with emerging technologies.

4. Preparing Students for the Future Workforce - Familiarity with AI and computational concepts enhances employability in emerging sectors such as data analytics, automation, robotics, and digital innovation. India's future workforce will need AI-augmented skillsets to stay competitive in the global digital economy.

Making Learning More Engaging and Personalized

AI-powered learning systems can -

1. Identify individual learning gaps and provide adaptive support.
2. Offer real-time feedback and personalized learning paths.
3. Use gamified and interactive content to enhance engagement.

This creates an environment of student-centric learning rather than uniform instruction.

5. Bridging the Digital and Social Divide - If designed inclusively, AI education can reduce inequalities by bringing quality learning tools to remote and underserved regions. Government-supported access programs can democratize digital learning, ensuring equitable participation across socio-economic groups.

6. Strengthening Foundational Human Skills

Well-guided AI education enhances -

1. Problem-solving and logical reasoning.
2. Creativity and innovation through simulation-based learning.
3. Collaboration through project-based and interdisciplinary AI challenges.

It encourages students to use technology as a tool for human empowerment, not dependency.

Arguments Against

1. Rapidly Changing Technology - AI technology evolves faster than curriculum frameworks can adapt. Updating syllabi regularly across thousands of schools poses administrative and logistical challenges. Constant revisions are necessary to avoid teaching obsolete concepts.

2. Digital and Infrastructure Divide - Many Indian schools — especially in rural areas — lack computers, electricity, or stable internet access. Introducing AI education without bridging these gaps could widen the rural-urban digital divide, benefiting only privileged students. Infrastructure investment must precede curriculum rollout.

3. Untrained and Overburdened Teachers - Most teachers lack AI literacy and may find it difficult to teach AI-based concepts effectively. Training millions of teachers nationwide will require massive investment, institutional support, and time. Without proper training, implementation risks becoming tokenistic or superficial.

4. Risk of "Dis-education" and Reduced Motivation - Over-reliance on AI tools for assignments or problem-solving may reduce curiosity, critical thinking, and persistence among learners. Students might depend on AI-generated answers, leading to shallow learning or academic shortcuts.

5. Unproven and Biased Technology - AI systems often reflect biases in the data they are trained on. Exposure to biased or unfiltered AI content can reinforce stereotypes and misinformation. Children may trust AI outputs blindly, undermining their ability to question or reason independently.

Way Forward

1. Adopt a Phased, Age-Appropriate Approach - Introduce AI literacy (concepts like logic, patterns, and ethics) in early grades .Introduce AI skills (coding, data analysis, robotics) only at higher levels (secondary/senior secondary). Encourage cross-disciplinary integration rather than standalone AI courses initially.

2. Strengthen Teachers and Infrastructure - Focus on continuous teacher development through digital literacy programs. Provide adequate infrastructure — including devices, internet access, and digital labs — particularly in government schools. Leverage public–private partnerships (PPPs) to scale resources efficiently.

3. Integrate Ethics and Safety Safeguards - AI curriculum must include ethical modules on -

1. Bias, discrimination, and misinformation.
2. Data privacy and responsible use of AI systems.
3. Cyber safety and child protection.

Establish AI safety protocols for all digital tools used in schools.

4. Promote Creativity and Lifelong Learning - Encourage project-based learning that integrates AI with local problem-solving — agriculture, waste management, or community mapping. AI should be used to enhance learning, not replace human effort. Foster a culture of adaptability, curiosity, and continuous learning to prepare students for dynamic technological change.

Conclusion

The integration of AI and Computational Thinking in India's school curriculum represents a progressive step toward 21st-century education. However, success will depend on careful planning, inclusive implementation, and robust teacher empowerment. A balanced approach, combining technological literacy with ethical understanding and human creativity, will ensure that AI becomes a tool for empowerment, equity, and innovation, not division or dependency.

Source - https - //www.thehindu.com/opinion/op-ed/should-ai-be-introduced-as-part-of-school-curricula/article70222719.ece