

Teacher Productivity with AI Tools



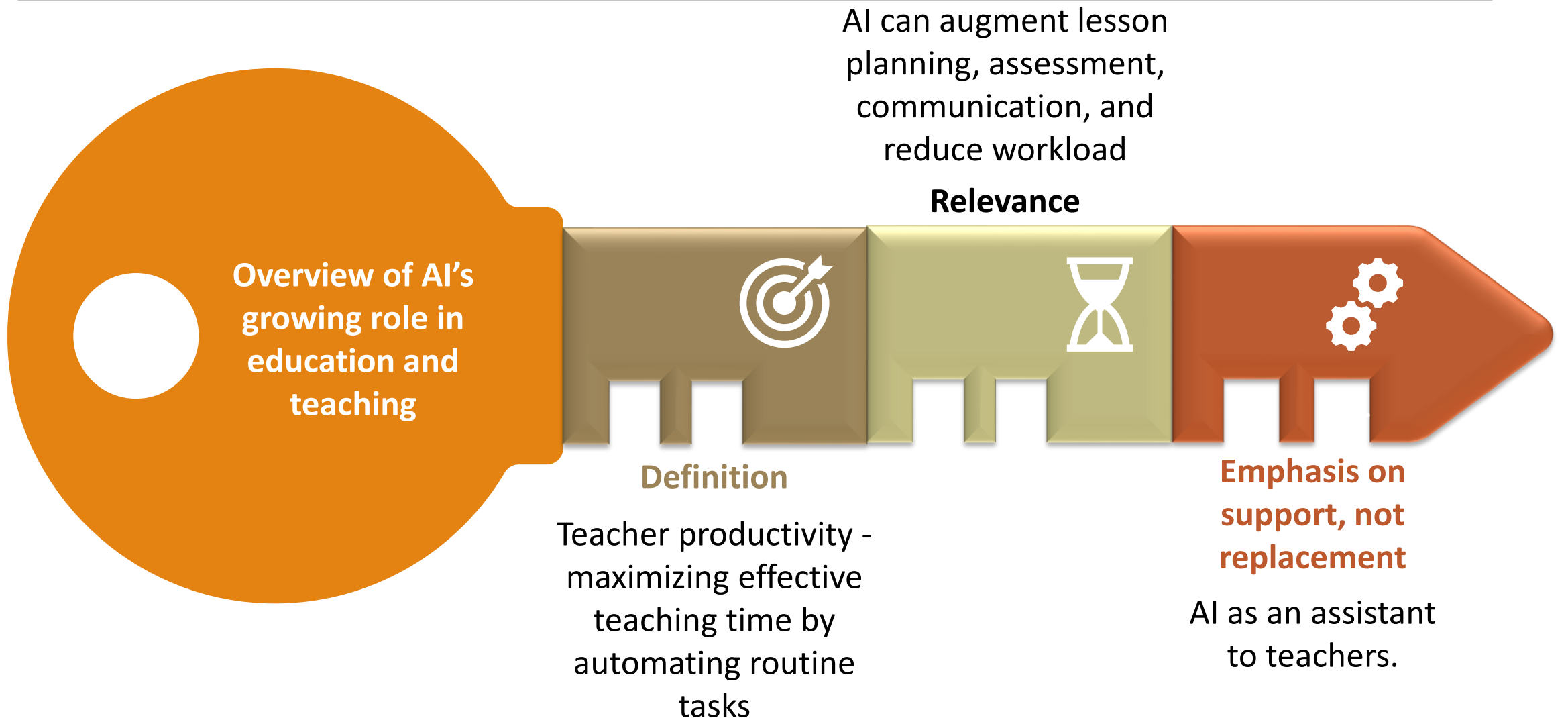
AI Training Program for Teachers

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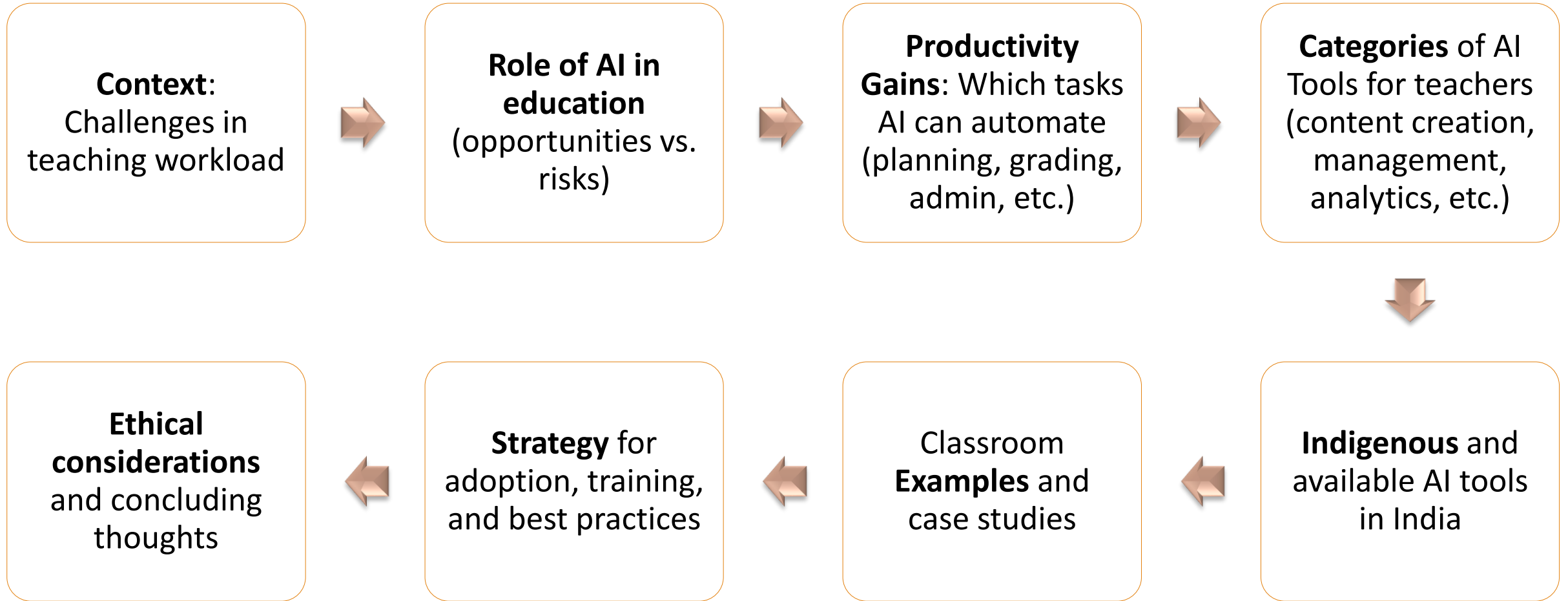
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Introduction



Agenda



Teaching Workload Challenges

01

Teachers play multiple roles: instructor, mentor, planner, assessor, administrator.



02

High administrative and non-teaching workload (e.g., attendance, record-keeping) keeps teachers away from students



03

In India, teacher vacancies and large class sizes add pressure (e.g., 24:1 average rural ratio)



04

Many teachers report long hours or unpaid overtime (up to ~15 hours extra/week) managing paperwork and lesson prep.



AI in Education – Opportunities and Trends



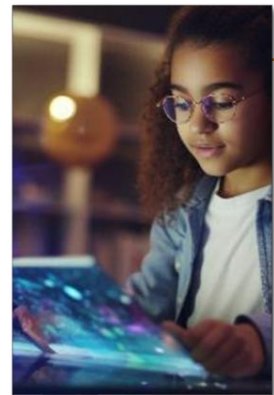
AI Adoption

- Rapid growth in education AI; India's edtech market is integrating AI (e.g., smart tutoring, analytics)



Generative AI

- Chatbots like ChatGPT/Gemini allow instant explanation of concepts (widely used by students for HW)



Adaptive learning

- Platforms adjust content to student performance (personalized learning paths)



Teacher Support

- AI can reduce menial workload so teachers “can focus on teaching”

AI as a Teacher's Assistant (Not Replacement)

AI excels at routine tasks

- Data processing, content generation, translation, but lacks human empathy and judgement

Principle

- *AI should support, not replace* teachers
- AI handles preparatory & administrative work, while teachers handle guidance, critical thinking, and personal connection

Teachers remain the decision-makers

- Review AI outputs, ensure correctness, ethical use

Indian policy emphasis

- NEP 2020 and CIET curricula highlight human-centered AI integration



Tasks for Automation: Where AI Helps Productivity



Lesson Planning & Content Drafting

AI can generate lesson outlines, activities, examples, & worksheets tailored to curriculum and local context



Assessment & Feedback

AI can auto-generate quizzes (MCQs, short answers), rubrics, and initial feedback on assignments



Classroom Management

Automating attendance tracking, scheduling, and performance dashboards (e.g., Teachmint X for attendance)



Language & Accessibility

Translation and narration of lessons into regional languages (e.g., Bhashini, Read Along)



Administrative Work

Drafting notices, letters, meeting minutes, and compiling reports by summarizing notes

Content Creation and Lesson Planning



AI-assisted lesson outlines

- Teachers prompt AI (e.g. “Plan a Class 8 math lesson on fractions”) to draft lesson structure, key points and examples



Generating explanations and examples

- Use ChatGPT or Khanmigo for simplified step-by-step explanations or context-specific analogies



Visual aids creation

- AI tools (Napkin AI) convert text ideas into illustrative images; Gamma and Scribe can auto-create slide decks from outline



Customization

- AI can tailor content to student levels and local context by adjusting language complexity or cultural examples

Assessment and Feedback Automation



Quiz and worksheet generation: AI can create question banks (MCQs, fill-in-the-blanks, short answers) on a topic



Instant feedback hints: For written work, AI can suggest improvements or explanations for wrong answers



Automated grading (where possible): AI can grade objective answers or code labs; even generate sample rubrics for open-ended tasks



Analytics reports: Basic analytics (e.g. topic-wise class performance) can be compiled by AI to show where students struggled

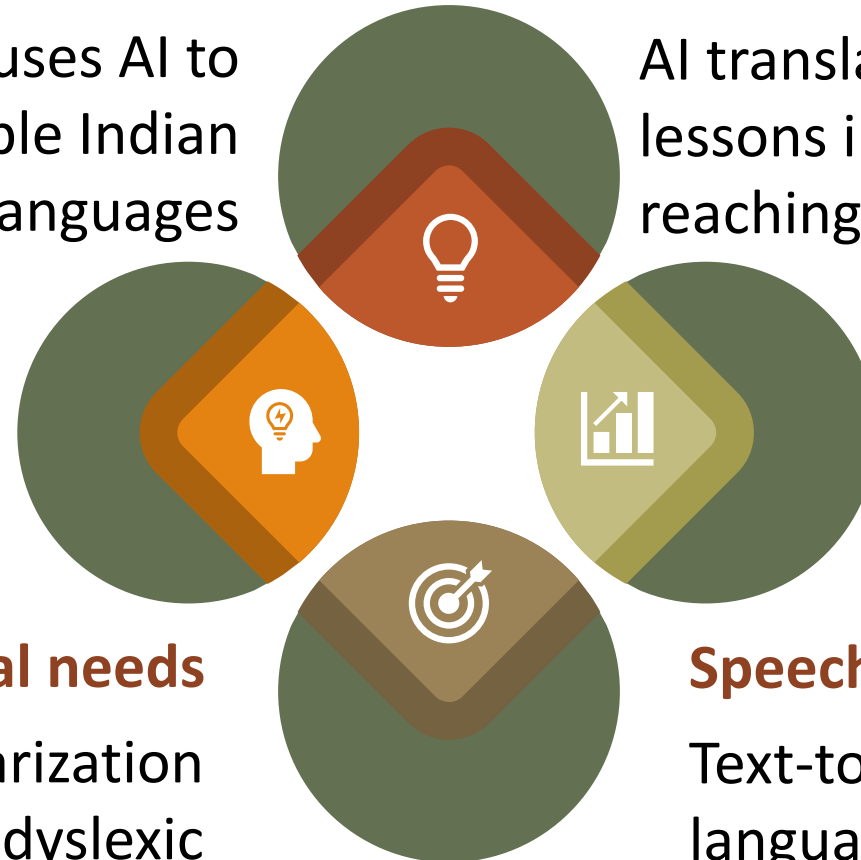
Language, Translation, and Accessibility

Example

Google's Read Along app uses AI to tutor reading in multiple Indian languages

Multilingual content

AI translators (e.g. Bhashini) convert lessons into local languages/ dialects, reaching students in their mother tongue



Supporting special needs

AI transcription and summarization help hearing-impaired/ dyslexic students

Speech & text tools

Text-to-speech (narration in Indian languages) & speech-to-text (for note-taking/ accessibility) improve inclusion

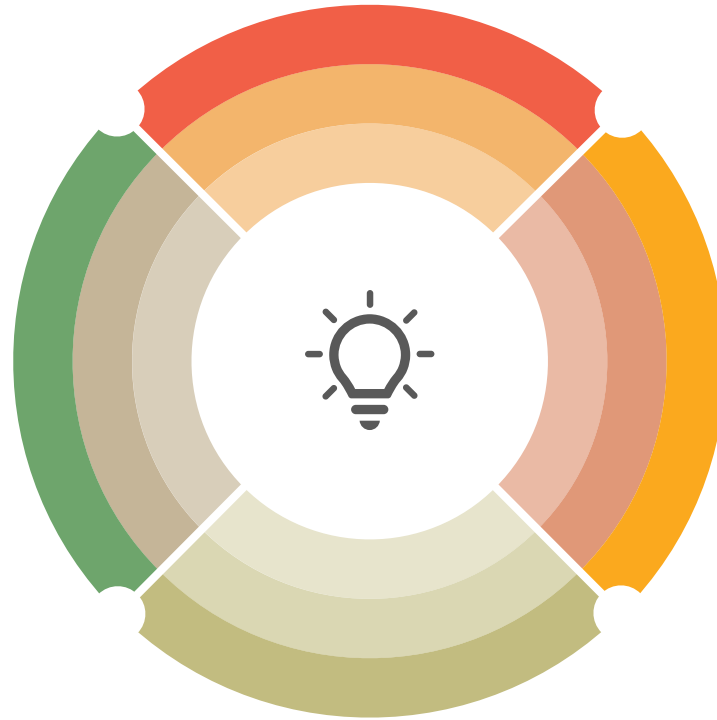
Automating Administrative Tasks

Example: Delhi govt pilot

AI tools like Gamma used to quickly create presentation slides for extracurricular planning

Idea generation for activities

AI suggests topics and planning ideas for events (festivals, sports days, etc.) – e.g., brainstorming prompts



Reporting and documentation

Smart attendance systems (e.g. Teachmint X) automate roll-call and track student presence

Reporting and documentation

AI can compile monthly report cards, summarise parent meeting notes, or draft newsletters

Indigenous and Indian AI Tools



Teachmint
(Bengaluru startup)

Classroom platform with AI-driven attendance, content sharing, communication tools



DIKSHA
(Govt of India)

National learning platform with teacher content; plans to integrate AI for personalized lesson recommendations.



Bhashini
(Govt mission)

AI system for translation and speech in Indian languages



Byju's TeacherGPT &
ConveGenius

(India's edtech) use AI tutors (TeacherGPT gives feedback, ConveGenius's SwiftChat delivers lessons in 13 languages).



IBM/NIIT
partnership

Localized AI curriculum tools (e.g. AI-powered coding platforms)



AI4Bharat

Open-source Indian-language AI models for education (e.g. Indic NLP libraries used in Assam, Odisha projects)

Classroom Examples and Case Studies

Western Australia (for context)

Pilot AI program cut teachers' lesson-planning time by ~30% (in 8 schools).

Chhattisgarh Bastar

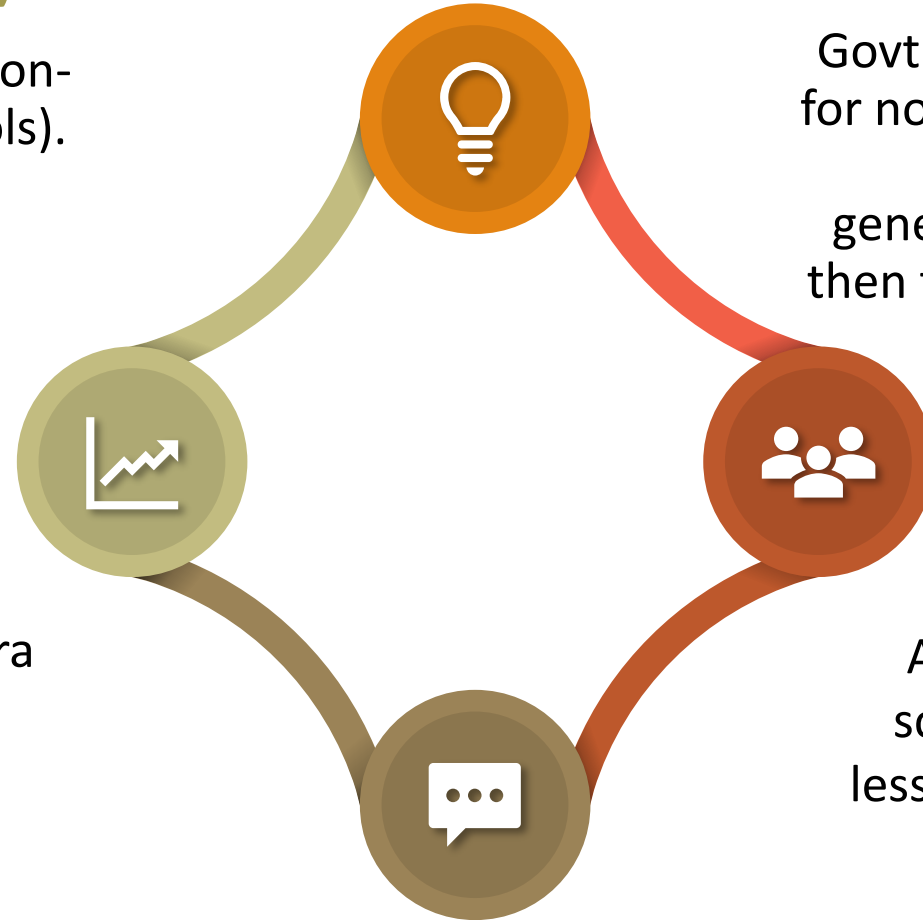
"VidyaBot" AI tutor taught algebra with farming analogies, raising a student's scores by 30%

Delhi Schools (2025)

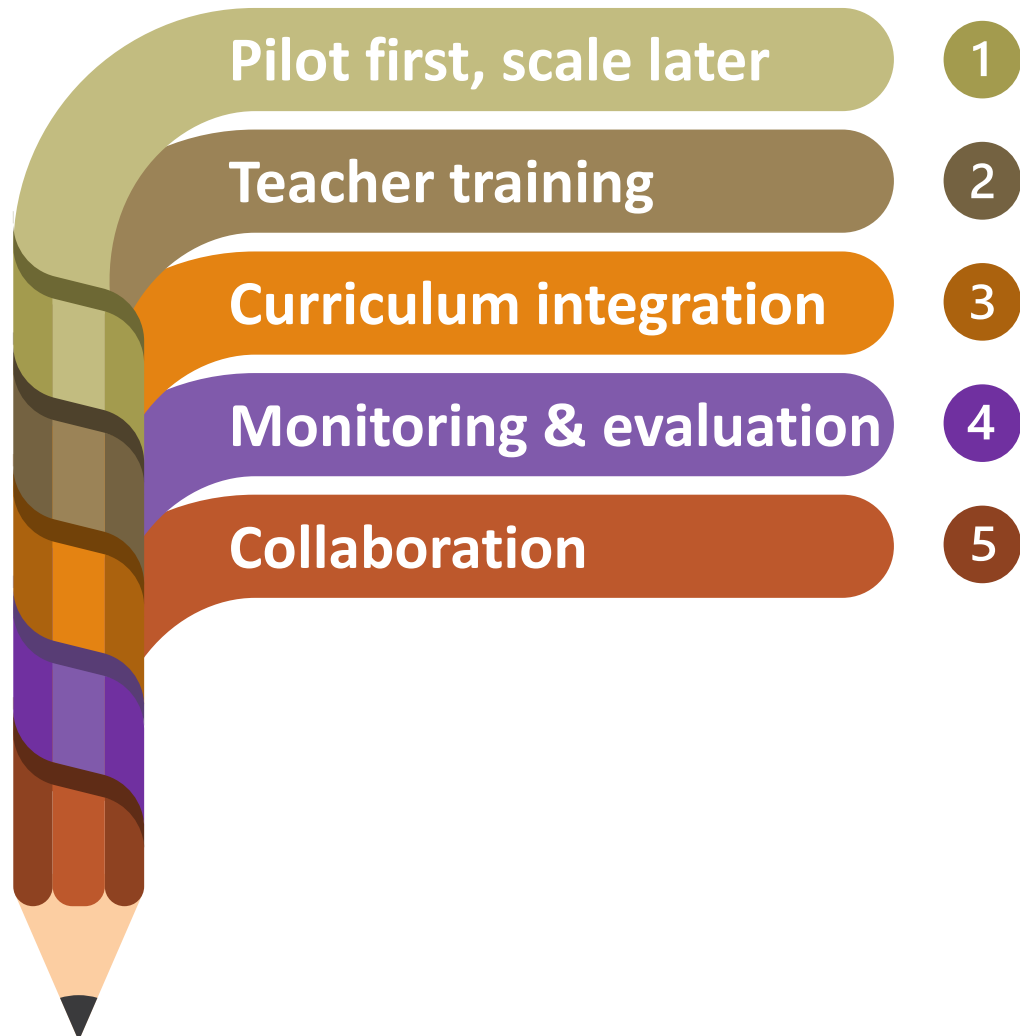
Govt trained 100 master teachers on AI for non-teaching tasks. Tools like Napkin (text-to-images) and Gamma (PPT generation) were introduced. Teachers then trained peers, with feedback loops to refine the program.

Rural Odisha (2025)

AI4Bharat + Odisha pilot: 200 tribal schools with AI "smart" classrooms, lessons delivered in Odia and Santhali using local cultural examples



Integrating AI – A Strategic Approach



Start with small projects (pilot classes/schools) and gather feedback

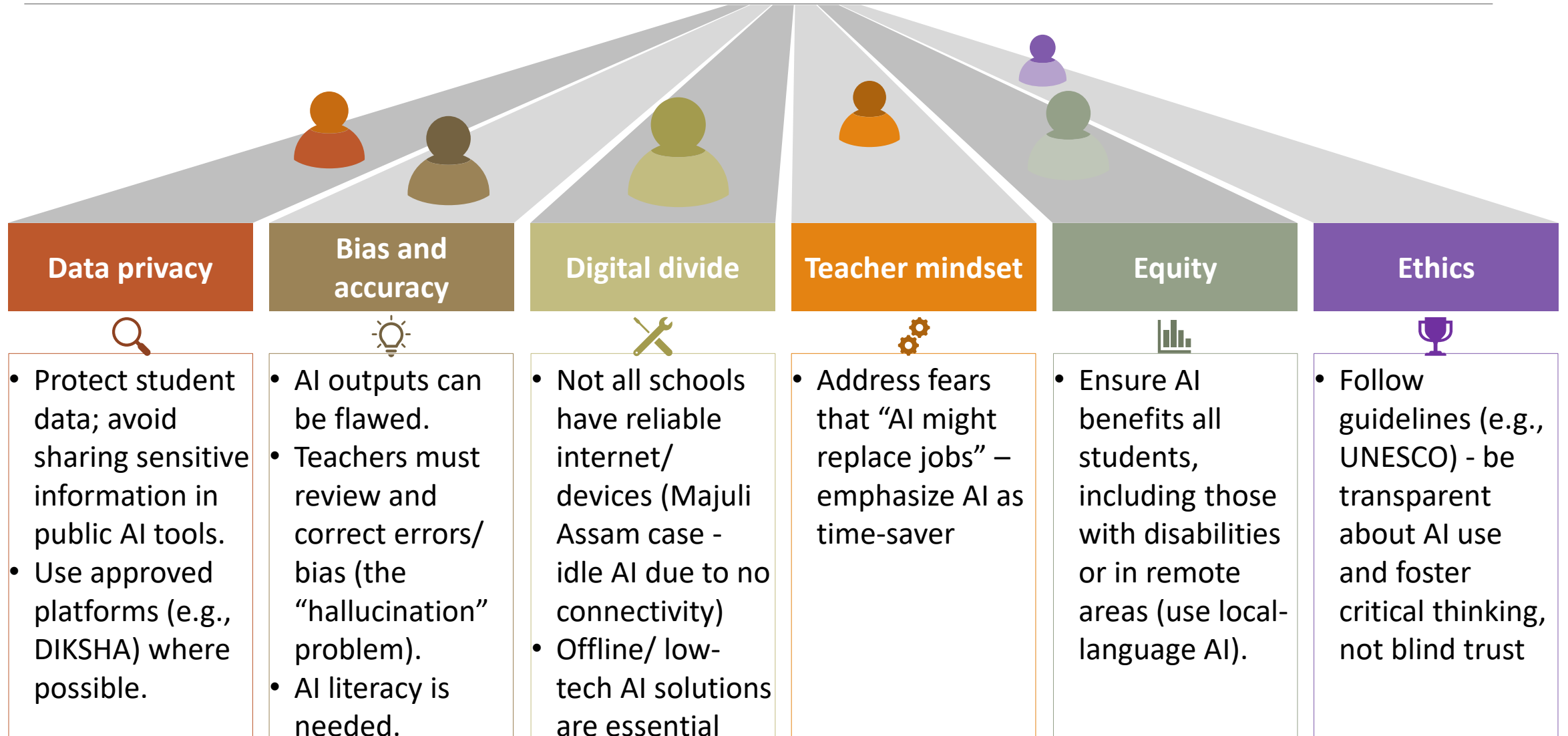
Provide hands-on AI literacy & tool-use workshops (NCERT is doing)

Align AI tools with syllabus and 21st-century skills in NEP. Use AI to support, not supplant, pedagogy

Collect data on tool usage & student outcomes; iterate. Follow up to ensure tools are used effectively

Engage school leaders, IT staff and teacher communities to champion AI usage

Challenges and Ethical Considerations



Conclusion and Future Outlook



LONG-TERM VISION

- As India advances AI (e.g., BharatGPT, expanded DIKSHA, local innovations), our classrooms will continually evolve.
- Teachers who adopt AI strategically will lead this transformation



HUMAN + AI

- The future classroom is hybrid – AI handles data and personalization, teachers focus on creativity, ethics, and mentorship



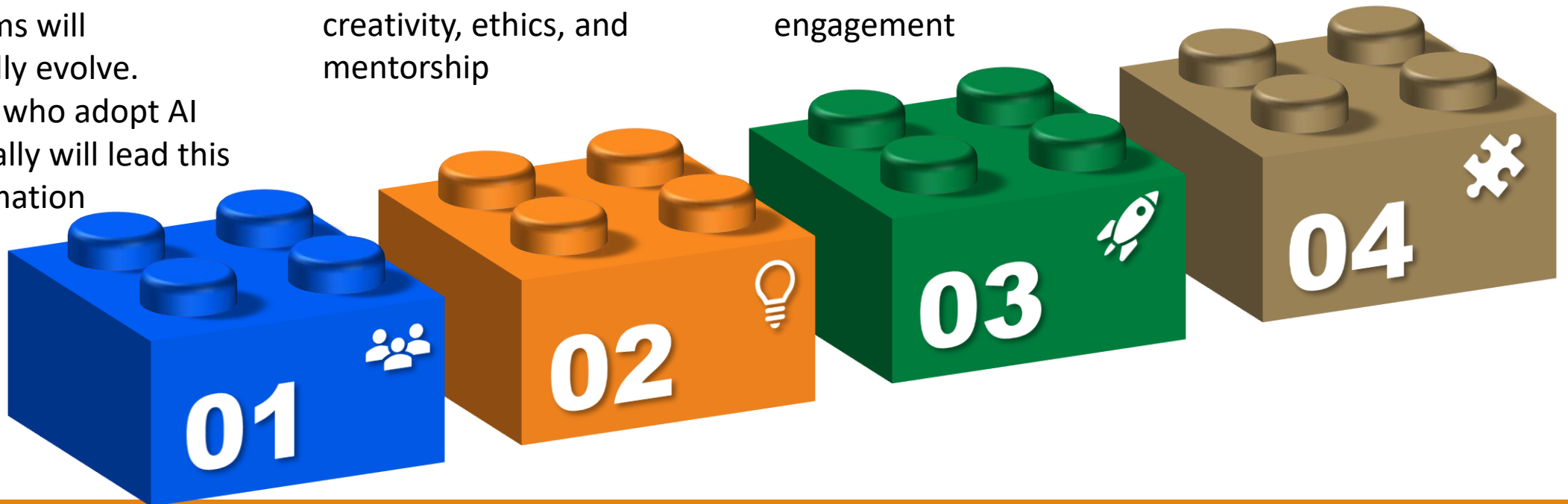
KEY TAKEAWAY

- AI tools can dramatically reduce routine work for teachers, boosting productivity and student engagement



EMPOWERMENT

- Provide teachers with AI literacy so they become confident users and guides for students engagement



Q&A