Department of Higher Education
Ministry of Education
Government of India

AKHIL BHARATIYA SHIKSHA SAMAGAM 2025

29th July, 2025

Minutes of the Meeting

Contents

I. Introduction

The Ministry of Education convened the Akhil Bharatiya Shiksha Samagam (ABSS) 2025 on 29th July 2025 at Bharat Mandapam, commemorating the fifth anniversary of the National Education Policy (NEP) 2020. The event was inaugurated by Hon'ble Education Minister Shri Dharmendra Pradhan and brought together a diverse group of stakeholders including policymakers, academicians, educators, industry leaders, and government representatives.

ABSS 2025 served as a national platform to reflect on the transformative progress made under NEP 2020 and to chart the course for the next phase of educational reform. The deliberations focused on making education more inclusive, skill-driven, and aligned with employment opportunities in a rapidly evolving global economy. Key themes included achieving 100% Gross Enrollment Ratio (GER) in secondary education by 2030, promoting Bharatiya Bhasha, integrating technology in classrooms for mainstreaming Indian Knowledge Systems (IKS), and fostering equity and accessibility in learning.

Potential to scale AI innovations across the education system and building on India's success in implementing large-scale digital initiatives like Aadhaar, DigiLocker, and BHIM UPI was emphasized. Discussions also explored the creation of a Digital Public Infrastructure (DPI) framework for AI in education, with institutions like CPMU playing a key role in its development.

The document summarizes key discussion points and way forward for Department of Higher Education to further strengthen India's higher education system.

II. Session outcomes

1. Thematic Session 1- Use of Bhartiya Bhasha in Teaching – Learning

a) Name of the moderator and panelists

Moderator:
Dr. Anil Sahastrabudhe – Chairman, NETF

Panelists:
1. Shri Chamu K. Shastry, Chairman Bharatiya Bhasha Samiti
2. Prof. M. Jagadesh Kumar, Former Chairman, UGC
3. Prof. Shailendra Mohan, Director, CIIL, Mysore
4. Dr. Anuradha Joshi, Principal, Sardar Patel Viyalaya, New Delhi
5. Dr. Mahendra Mishra, Linguistic Expert, Odisha

b) Key Discussion Points
   i. Foundational and early primary education is most effective when delivered in the mother tongue, enabling deeper conceptual understanding and smoother cognitive development.
   ii. Scientific evidence confirms that learning in the mother tongue enhances activity in the prefrontal cortex, improving critical thinking, creativity, and long-term learning outcomes.

iii. The emotional, cultural, and intellectual confidence of students is significantly enhanced when they learn in the language spoken at home, yet they face challenges when transitioning to English-medium institutions at higher education levels if appropriate support is not provided.

iv. Language acquisition is innate and supports cognition beyond communication; similarities in grammar and syntax across Indian languages present an opportunity for cross-linguistic integration.

v. There is a common misconception among tribal and rural teachers that instruction in the national language ensures academic advantage, leading to the neglect of native tongues in early instruction.

vi. Several Indian schools with a mother tongue-first approach (e.g., teaching in Hindi till Grade-5) demonstrate high English proficiency by middle school, challenging assumptions about early English-medium education.

vii. The closure of schools teaching in regional languages signals a growing societal preference for English-medium education, driven by perceived job market benefits.

viii. Teaching-learning processes in the mother tongue go beyond textbooks, enabling more performative, organic, and community-based education.

ix. NEP 2020 differentiates between learning Indian languages and learning through Indian languages—both are essential for building cognitive and cultural foundations.

x. Some notable examples of HEIs were brought up that are integrating language in everyday learning of students such as CU Tamil Nadu has scientific journals in regional languages and IIT Jodhpur is the first IIT to launch B.Tech in Hindi.

c) Suggested Way Forward

i. Encourage the use of mother tongue as the primary medium of instruction at least until Grade 5, and integrate it meaningfully into later years to prevent cognitive and cultural dissonance.

ii. Continue and expand initiatives to translate textbooks and curricula into 21 Indian languages with rigorous linguistic vetting to ensure quality and cultural contextuality.

iii. Develop a standardized lexicon of 'Bharatiya terms' for technical and scientific concepts to improve accessibility and comprehension across languages.

iv. Strengthen teacher training programs to certify educators in delivering content effectively in regional languages and multilingual classrooms.

v. Design policies that support schools offering regional language instruction, preventing closures and encouraging parental confidence in mother tongue education.

vi. Ensure that official language promotion does not result in hierarchical dominance over lesser-spoken regional languages; linguistic equity must be maintained.

vii. Actively engage parents and community members in the language-in-education discourse to build grassroots support for mother tongue-based instruction.

viii. Encourage linguistic porosity among Indian languages to build mutual intelligibility and shared cultural understanding.

ix. Expand digital tools like the Bhasha Sagar app to provide regionally translated educational content and promote language learning in a technology-enabled environment.

x. Carefully balance the implementation of the three-language formula to avoid overburdening students while leveraging the cognitive benefits of multilingualism.

xi. Provide socio-emotional and academic support to students transitioning from mother tongue education to higher education settings dominated by English.

2. **Thematic Session 2 - Anusandhan National Research Foundation (ANRF) & Prime Minister's Research Fellowship (PMRF): Nurturing India's Next Generation of Academic and Industry Leadership**

a) Name of the moderator and panelists

Moderator
Prof. Yogesh Singh, VC, Delhi University

Panelists
1. Dr. Shivkumar Kalyanaraman, CEO, ANRF
2. Prof. Rajeev Ahuja, Director, IIT Ropar
3. Shri Bodhisattwa Sanghapriya, Founder IG Drones
4. Dr. Nikhil Agarwal, MD, FITT
5. Prof. Ashwini K. Agrawal, Dean (R&D), IIT Delhi

b) Key Discussion Points

i. **Vision 2047:** From Make in India to Dream in India: The national vision encapsulates a journey from Make in India to Design in India to Innovate in India and to Dream in India, with 2047 as the milestone for achieving global leadership in innovation

ii. NEP 2020 mandates HEIs to establish incubation, innovation, and frontier research centers. While Institutes of Eminence (IoEs) have made progress, state and central universities are still in the process of building such capacities.

iii. ANRF is positioned as India's apex statutory body for research, innovation, and entrepreneurship, akin to the NSF (USA), with a mission to catalyze economic value chains and societal impact pathways.

iv. PMRF supports high-quality PhD research aligned with national priorities, including SDGs, critical technologies, and deep-tech innovation.

v. ANRF, established by an Act of Parliament, serves as the central strategic body for research and innovation in India. It operates through two key components:

vi. **ANRF Core:** Grant-in-aid for foundational and mission-mode research.

vii. **ANRF RDI Fund:** Patient capital, debt/equity not-grants for translational research and commercialization.

viii. A ₹1 lakh crore fund is earmarked to support the commercialization of innovations by industry.

ix. PMRF 1.0 has produced scholars with higher H-indexes and has helped curb brain drain.

x. PMRF 2.0 aims to scale up to 10,000 scholars, expanding institutional coverage and aligning with national missions.

xi. A significant portion of PMRF research is focused on SDGs and critical emerging technologies, especially advanced materials and nanotechnology.

xii. PMRF Scholars have contributed to:

xiii. Over 3,490 publications and patents across domains like AI, Quantum Computing, Biotech, and Renewable Energy.

xiv. Startups like Techsha, CAAPI.AI, Sahas Labs, and Avatt Technologies, showcasing lab-to-market transitions.

xv. Emphasis on Technology Readiness Levels (TRLs):

       a. PMRF and FITT initiatives support movement from TRL 3 (proof-of-concept) to TRL 7+ (deployable products).

       b. ANRF spans basic to applied to translational research, enabling deep science to deep tech.

xvi. Persistent Challenges in Industry-Institute Linkages include: IP ownership and licensing complexities, Technology readiness gaps, Rigid institutional processes, Limited faculty mobility, Funding model incompatibilities and Geographic and sectoral disconnects. These issues hinder effective translation of research into market-ready solutions

xvii. There is concern that mass education has overshadowed innovation, and research is not yet seen as aspirational.

xviii. Innovation requires free flow of information, mobility of researchers, robust infrastructure and talent development. These elements are essential to build a thriving research and innovation ecosystem across all tiers of institutions.

c) Suggested Way Forward:

i. Support state and central universities in establishing incubation, innovation, and frontier research centers, as mandated by NEP 2020.

ii. Encourage faculty-student co-creation of ventures, with institutional support for IP, licensing, and commercialization.

iii. Develop translational research ecosystems with clear IP frameworks.

iv. Identify avenues through which FITT IIT Delhi model can be scaled to codesign research programs, IP management, spin-offs, and innovation infrastructure.

v. Promote hub-and-spoke models for regional innovation ecosystems through shared R&D infrastructure across regions, enable mobility of researchers and ensure free flow of information and data to foster open innovation.

vi. Create industry challenge platforms where companies post real-world problems and researchers bid to solve them.

vii. Incentivize co-development models where IP is jointly owned and commercialized.

viii. Scale up Professor of Practice programs with industry experts embedded in academia. Enable faculty sabbaticals in industry and vice versa.

ix. Create mobility grants for researchers to work across labs, startups, and global institutions.

3. Thematic Session 3- COE in AI for Education – Transforming Teaching and Learning ecosystem

a) Name of the moderator and panelists

Moderator

Dr. V. Kamakoti, Director IIT Madras

Panelists

1. Shri Srikanth Nadhamuni, CEO, Khosla Lab
2. Dr. Balaraman Ravindran, Head, Wadhawani School of Data Science & AI
3. Shri Shankar Maruwada, Ekstep Foundation
4. Ms, Karishma Shanghvi, Director, Shikha Academy
5. Ms. Swati Vasudevan, MD & CEO, Khan academy, India

b) Key discussion points

    i.   Building blocks in making AI applicable to education:
- **Local Language Access:** AI-powered language models (LLMs) can effectively deliver educational content in regional languages, making learning more inclusive.
- **Home-Based Learning:** LLMs can support self-paced learning at home, especially for students without access to formal coaching.
- **High-Quality Translation:** AI can translate educational materials into multiple Indian languages, ensuring consistency and quality across regions.
- **Personalized Assistance:** AI tools can act as patient, responsive tutors—answering student queries and providing tailored support.

    ii.   To unlock AI's full potential in education, it's crucial to map the entire student learning journey, identify gaps, and pinpoint where AI can offer targeted support.

    iii.   AI literacy must become universal for students in coming years, hence, waiting for all teachers to master AI before introducing in classroom isn't practical- students need immediate access to AI tools and learning resources to stay future-ready.

    iv.   Role of teachers:
- Teachers who use AI alongside textbooks and the internet can offer far more effective and personalized instruction.
- AI can help redesign teacher training, professional development, and classroom practices—unlocking use cases that were previously unimaginable.
- India has a unique chance to lead the world in redefining the teacher's role through innovative use of AI.

    v.   There are 3 types of students and AI can target them differently to enhance their learning outcomes:
- Motivated learners who benefit from effort-driven progress.
- Confident but unmotivated students who need engagement strategies.
- Foundational learners—those in higher grades but still struggling with basic skills like reading.
- AI can play a critical role in supporting each group through personalized learning paths, adaptive content, and targeted interventions.

    vi.   Utilizing AI for student assessment:
- The education paradigm is shifting—students must be encouraged to solve real-world problems using AI tools.
    - Large Language Models (LLMs) can help design challenging assessments and support deeper learning.
    - AI offers a chance to redefine what and how students learn, making education more relevant and future-ready
    - Students must be taught how to write queries in AI to gauge their understanding levels

    vii.   Training of AI models –
- LLMs must be responsible and aligned with traditional teaching methods to effectively support educators.
- AI should be patient and encouraging, avoiding emotional triggers and adapting to each learner's pace and needs.

- Ethical design is essential—AI tools must be free from bias and ensure the safety and well-being of all learners.
- India has a unique opportunity to lead in designing thoughtful, inclusive AI systems that reimagine teaching and learning.

viii. Using domain specific AI models:
- Learning Leakage: General-purpose AI models can produce unexpected outputs; domain-specific models offer more control and relevance.
- Monitoring Advantage: Smaller, focused models are easier to monitor and regulate, ensuring safer and more effective use.
- Positive Impact: A thoughtfully designed LLM can foster a sense of self-worth in students by offering personalized, respectful, and encouraging interactions.

ix. Users / Students losing creativity in the era of AI (ChatGPT):
- While smartphones and AI offer immense value, their overuse can lead to reduced cognitive engagement and creativity.
- Responsibly used, AI can enhance thinking and spark new ideas that students might not explore otherwise.
- Excessive simplification of learning through AI may hinder higher-order thinking—studies show reduced frontal lobe activity.
- There's a need for further research on how AI-based learning affects brain function, especially when students learn something entirely new.
- Domain-specific models are preferable, as they reduce unintended outputs and are easier to monitor.
- Thoughtfully designed LLMs can positively influence student self-worth and motivation.

c) Suggested way forward:

i. Beyond R&D Centers: AI in education should not be limited to app development or isolated research hubs—it must drive systemic transformation.
ii. Universal Access: The goal should be to make AI innovations available to every student across India, regardless of location or background.
iii. India's Tech Legacy: With successful national platforms like Aadhaar, DigiLocker, and BHIM UPI, India has proven its ability to scale technology by developing solutions of use cases and then focusing on expansion. The same approach can be applied to AI in education.
iv. Key Focus Areas:
  - Equitable access to AI tools
  - Integration with existing education systems
  - Teacher and student empowerment
  - Ethical and responsible AI deployment
v. Digital Public Infrastructure (DPI) for AI: A DPI architecture should be developed to diffuse AI across the nation. Institutions like CPMU can play a role in identifying and shaping this structure.