

Session 1.

Large language models in 2026 – a GenAI ecosystem analysis of China & the US

**Prof. Ken Spours, College of Education, Capital Normal University
& UCL Institute of Education**

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Series objectives

By the end of this Series participants should be able to:

- Understand the evolution of generative AI and AI ecosystems.
- Compare Chinese, Western and global AI ecosystems.
- Explain the changing role of universities in AI-driven societies.
- Evaluate strategies for building institutional AI capability.
- Understand the significance of collective intelligence and human-machine collaboration.
- Consider the future role of universities in technological and societal transformation.

Session objectives

By the end of this session participants should be able to:

- Understand key GenAI developments during 2025-26.
- Compare Chinese and US GenAI ecosystems.
- Explain the growing importance of AI ecosystems, agentic AI and machine memory.
- Analyse the relationship between AI, political economy and technological sovereignty.
- Explore computational capitalism and socialised alternatives.
- Evaluate China's emerging hybrid AI ecosystem model.

Section 1.
Key GenAI developments in 2025-26

Western & Chinese LLM comparison in 2026

Western Models	Key strengths	Chinese Models	Key strengths
GPT-5 / GPT-4o (OpenAI)	Frontier reasoning, enterprise integration, multimodal AI	DeepSeek V4.1	Open-weight frontier model, reasoning, coding, 1M-token context
Claude (Anthropic)	Long-context analysis, research support, safety and reliability	Qwen 3.8 Max (Alibaba)	Strong multilingual performance, coding, agentic tasks
Gemini (Google)	Very large context windows, multimodality, ecosystem integration	ERNIE 5.1 (Baidu)	Advanced multimodal, search integration, reasoning
Llama (Meta)	Open-weight ecosystem, research and customisation	Kimi K3 (Moonshot AI)	Long-horizon reasoning, coding, research, 1M-token context

Machine memory for sustained intellectual collaboration

- **Larger context windows** - from 128k-200k tokens to 1M+
- **Improved contextual** recall allows more consistent responses across extended dialogues
- **Enhanced tracking** of complex projects, documents and multi-stage tasks
- **Growing capacity to support long-term research**, planning and knowledge development

LLMs - what changed between 2025-2026?

2025	2026
LLMs the main focus	AI ecosystems becoming the focus - the whole application system
Text generation dominated	Multimodal systems (text, image, audio, video) becoming standard
General-purpose chatbots	Personal and institutional AI agents
AI as a tool	AI increasingly embedded in workflows and organisations
Focus on model size	Focus on efficiency, diffusion & integration

Reflections on the 2025-26 shifts

In the coming age of AI ecosystems, competitive advantage may depend less on possessing the most powerful model and more on the ability to align technology, institutions, talent and governance around a shared developmental project.

Section 2.
The Chinese and US GenAI ecosystems
– similarities and differences

China and the US look similar in generic terms

- Massive investment in AI infrastructure and foundation models
- Strategic recognition of AI as a key driver of economic competitiveness
- Strong partnerships between universities, research institutes and industry
- Rapid movement from LLMs towards multimodal and agentic AI systems
- Competition to attract and develop AI talent
- Increasing focus on AI deployment across education, healthcare, manufacturing and public services

China and the US have different strategic aims

United States	China
Market-led innovation	State-guided market innovation
Dominance of large technology corporations	Coordination - state, industry & universities
Proprietary model competition	Open weight models
Venture capital as a major driver	National planning and industrial policy
AI framed through innovation and market leadership	AI framed through innovation and national modernisation
Focus on global technology domination	Emphasis on technological sovereignty

US & Chinese GenAI ecosystems compared

Dimension	United States	China
Frontier Models	Leadership in foundation models	Strong domestic model development
Innovation System	Venture capital investment	Strategic coordination and long-term planning
Technology Firms	Globally dominant platforms	Integration of digital and industrial firms
Semiconductors	Leadership -advanced chip design	Investment in domestic chip capability
Manufacturing	Software and platform services	Industrial and manufacturing deployment
Universities & skills	World-leading AI research institutions/elite talent	Universities integrated into national innovation strategies
AI Adoption	Strong business innovation in Fintech	Rapid diffusion across public services and industry
Strategic Goal	Technological leadership/market domination	Technological sovereignty/coordinated development

Collective ecosystemic development is the key

More powerful models are **necessary but not sufficient** – requirement to transform technological capability into collective ecosystemic development.

- social purposes
- advanced models and computational infrastructure
- industrial and societal applications
- universities and skilled users for talent pipelines
- regulatory and self-regulatory frameworks.

Section 3.
Political-economy-ecology
positioning of Chinese GenAI in 2026

China's geo-political-technological context

Factor	Significance
Strong state capacity	Ability to coordinate long-term technological development
Large domestic market	Extensive data, users and application opportunities
Industrial ecosystem	Integration of AI with manufacturing and the real economy
Educational expansion	Large-scale production of scientific and technical talent
Digital platforms	Strong domestic technology firms and infrastructure
Technological sovereignty agenda	Reduced dependence on external technologies
Regional innovation hubs	Development concentrated in major city-regions
National strategic planning	Alignment of technology with developmental objectives

Key challenges facing the Chinese GenAI model

Challenge	Strategic issue
Frontier innovation	Sustaining breakthroughs at the technological frontier
Semiconductor dependence	Domestic capabilities closing remaining computation gaps
Innovation versus regulation	Maintaining creativity within coordinated governance systems
University transformation	All universities becoming effective AI ecosystem builders and talent providers
Global fragmentation	Maintaining international engagement while advancing technological sovereignty
Social outcomes	Distributing AI benefits broadly across society

A social hybrid model with Chinese characteristics

How far has China developed a hybrid state-led socio-technological ecosystem that combines national coordination, market responsiveness and collective social benefit?

In what ways might this be the route to national technological sovereignty and global contribution?