POL-EMERGE

POLICY BRIEF

Promoting evidence-informed policymaking

POL:EMERGE

PART 1

EVIDENCE-INFORMED POLICYMAKING IN HIGHER EDUCATION THROUGH DIGITAL TRANSFORMATION

Key Insights from Malaysia, the Philippines, Thailand, and Vietnam

This policy brief is extracted from the research results of the major project "POL-EMERGE" – Policymaking under Rapid Emergence: Theory, Evidence, and Research Utilisation in Southeast Asian Higher Education. It aims to examine how higher education policymaking practices use evidence and research, specifically in relation to the rapid emergence of transformative technologies such as Artificial Intelligence, in four countries: Malaysia, the Philippines, Thailand, and Vietnam. As an innovative project, it combines documentary and doctrinal analysis, interviews, and Legislative Theatre as an interdisciplinary methodology to explore practices across ASEAN networks, with reference to the British Academy Evidence Inform Policymaking Framework.

To examine how higher education policy-making practices use evidence and research specifically in relation to the rapid emergence of transformative technologies in ASEAN countries, we have to:

- Identify higher education policies and policymaking impacting or impacted by transformative technologies in the sample countries;
- Identify the use of theory, evidence, and research in higher education policies and policymaking impacting or impacted by transformative technologies in the sample countries;
- Explore the interactional dynamics of transformative technologies in the use of theory, evidence, and research involved in higher education policymaking.

Our research team has collected data from 4 countries including Malaysia, the Philippines, Thailand, and Vietnam. Specifically, we analysed 122 national and local documents and interviewed 94 participants, including 25 government representatives, 18 higher education leaders, 22 lecturers and researchers, 9 civil officers, 7 students, and 13 graduates. We have successfully organised 4 Legislative Theatre Workshops in four countries that attracted 90 participants, including 23 government officers, 18 higher education leaders, 22 lecturers, 9 civil officers, 7 students, and 13 graduates.

In general, we found that all four countries have rapidly reframed higher education policies around transformative technologies, digitalisation, and especially AI, shifting content toward AI literacy, digital pedagogy, and workforce forecasting. They are reshaping policy content, policy processes, and evidence use in higher education across the four countries. Governments are institutionalising data-driven systems such as dashboards, automated QA, and national repositories; however, they still face persistent capacity, equity, and localisation gaps. Cross-country differences lie mainly in policy centralisation, the maturity of data systems, and the balance between top-down directives and bottom-up institutional innovation. In some countries such as Thailand, national policies act as guidelines for other local governments, departments, and provinces to follow and put into practice. The existence of local government or departmental policies is not prominent.

POL:EMERGE

PART 2

We used the British Academy Evidence Inform Policymaking Framework to analyse 122 documents, 94 interviews, and four Legislative Theatre workshops with 90 participants from four different countries.

Here is some key information we found:

POLICY CONTENTS

Every country in the study treats digitalisation and AI as essential for national growth, maintaining competitiveness, and driving education reform. Digital transformation is acting as a national imperative, and policies now integrate digital skills and AI directly into higher education, whether through AI literacy, micro-credentials, or digital teaching methods. This trend is evident across all countries. Specifically, Malaysia adopts a strong approach to national AI and ethics framing, with an emphasis on national roadmaps and governance instruments. Meanwhile, the Philippines focuses on the institutionalisation of flexible and digital learning (i.e., CMOs, ODL laws) and promotes human-centred AI governance, including proposed national AI bodies. Thailand pays greater attention to curriculum and QA reforms (AI credits, micro-credentials), along with government platforms (CISA, HEService) that are changing content and compliance requirements. Vietnam is ambitious with its National Digital Strategy, featuring cross-sector applications and an emphasis on national data platforms (HEMIS used for all HEIs, VNeID with wide nationwide usage). There is also a strong push for inclusive digitalisation, targeting ethnic minorities, rural areas, and people with disabilities.

POLICY PROCESS

The policy process is changing. There is a shift from episodic reports to continuous, technology-mediated evidence use, such as dashboards, digital submissions, and automated pre-checks across the four countries. While Thailand and Vietnam display more advanced automated submission and QA systems (e.g., CISA, HEService, national platforms), Malaysia and the Philippines show mixed centralisation, with a stronger emphasis on ethics frameworks and regional pilots.

NETWORKS & RELATIONSHIPS

Regarding networks and relationships, all countries show triple-helix growth, with expanding government–university–industry networks and increased international benchmarking. These networks are central to evidence co-production. Especially in the Philippines and Malaysia, bottom-up practices are clearly evident, as universities and student bodies create local guidance or pilot initiatives in the absence of national laws.

INSTITUTIONAL CAPABILITIES & SYSTEMS

From our data analysis, uneven levels of digital literacy among policymakers and educators are evident. Therefore, capacity building is repeatedly requested through the interviews and Legislative Theatre activities.

While Malaysia and Thailand show significant investment in national data infrastructure and capability building, rural and regional disparities still exist. Additionally, in Thailand, we find uneven AI capacity across HEIs based on digital readiness surveys conducted in the four countries. Similarly, the Philippines and Vietnam show clear evidence of emerging national strategies; however, operational capacity, such as training and platform access, falls behind in several regions.

PART 3

POL-EMERGE

"Aligning Knowledge, Policy, and Practice"

KEY FINDINGS

KEY FINDINGS

Digital transformation and AI are central pillars of higher education policy in the four countries. Specifically, digital tools transform both content and process; that is, AI changes what policies target (skills, ethics) and how evidence is produced and used (dashboards, automated QA).

Capacity and equity are the main constraints, as infrastructure limitations, instructor shortages, and urban–rural divides restrict effective EIPM in the four countries.

Hybrid governance is emerging: top-down roadmaps exist, but much policy experimentation and detail are enacted through bottom-up institutional pilots and sandboxes.

It is essential to develop a digital, collaborative, evidence-based, and ethically governed higher education ecosystem in the four countries. However, significant gaps and uneven readiness must be addressed for policy goals to be realised.

All four countries treat digitalisation, AI integration, and datafication as core national priorities rather than optional innovations. Higher education is seen as a driver of economic competitiveness, national development, and workforce readiness.

Across Malaysia, the Philippines, Thailand, and Vietnam, policies now embed AI literacy and digital pedagogy. Technology has shifted policy content towards AI literacy, digital pedagogy, and innovation ecosystems. Policy processes are transforming towards data-driven, automated, and continuous evidence use, and governance relationships are being reconfigured to adopt more collaborative and cross-sectoral approaches.

Inequities are exposed and demand localisation and inclusive approaches, alongside new ethical, emotional, and capacity challenges. Therefore, the requirement for upskilling with clearer guidance is evident.

PRACTICAL POLICY RECOMMENDATIONS

THE PROJECT RECOMMENDS...

To advance evidence-informed policymaking in higher education toward digital transformation, Malaysia, the Philippines, Thailand, and Vietnam need to strengthen data systems, institutional capacity, governance, and regional collaboration. Specifically, the following priority actions should be undertaken to provide a practical and scalable roadmap.

A Governments should begin by pilot-testing frameworks for major digital reforms, scaling initiatives only after evidence demonstrates effectiveness.

B It is necessary to build integrated and interoperable data systems. This means governments should establish or upgrade centralized Higher Education Management Information Systems that consolidate student progress, graduate employment, research, finance, and learning analytics, ensuring that data are readily available when needed.

C Ministries should roll out real-time digital dashboards to track enrolment, identify students at risk of dropping out, monitor equity, and assess institutional performance.

D Each country's ministries should establish a policy analytics unit staffed with data scientists, economists, and education policy experts who can translate data into real-world policy decisions.

E The use of evidence should be embedded as a core component of policymaking in the four countries. Strengthening institutional digital and human capacity is essential.

F Capacity building is critical. Universities should provide professional development in digital pedagogy and learning analytics for administrators and faculty. Institutional data governance frameworks must clearly define data ownership, privacy protections, cybersecurity standards, and ethical safeguards.

G Regional collaboration should be strengthened, and cross-border data sharing for mobility among the four countries, particularly within ASEAN, should be promoted. Shared quality indicators, digital credential recognition systems, regional benchmarking, and secure cross-border transcript exchanges are necessary to facilitate student mobility and workforce integration.

"Translating Insights into Policy Action"

POL:EMERGE

POL:EMERGE

Policy Brief

POL-EMERGE

Evidence-Informed Policymaking
in Higher Education through Digital Transformation

Key Insights from Malaysia

Introduction

The emergence of transformative technologies is changing how evidence is used in policy making, globally. In Malaysia, digital transformation and Artificial Intelligence (AI) are central pillars of national development and higher education reform, and they influence higher education policy on the one hand, and how evidence is used to shape higher education policies on the other hand. The "POL-EMERGE Project – Policymaking under Rapid Emergence: Theory, Evidence, and Research Utilisation in Southeast Asian Higher Education" examines how the rapid emergence of transformative technologies like Artificial Intelligence influence research and evidence use in higher education policymaking practices in four countries: Malaysia, the Philippines, Thailand, and Vietnam. Adopting an innovative combination of documentary and doctrinal analysis, interviews, and Legislative Theatre, this policy brief presents the key policy insights and recommendation for Malaysia.

Policymaking Practices

In Malaysia, national roadmaps and governance instruments strongly frame AI integration, digitalisation, and ethical data governance as core policy priorities. The country features a hybrid governance model where national blueprints coexist with bottom-up institutional pilots and experimentation. There is increasing expectation for real-time, digital evidence in policymaking; and government, universities and industry engage in a triple helix collaboration model.

"Aligning Knowledge, Policy, and Practice"

SUMMARY OF FINDINGS FROM RESEARCH

Malaysia has enacted series of policies and regulations, at the national and state levels, to govern the adoption of transformative technologies like Artificial Intelligence.

These policies and regulations acknowledge the relevance of AI in higher education, emphasising building AI ecosystems within universities, integration of AI into teaching, research, assessment and curriculum development.

They also recognise the importance of collaboration between Ministry of Science, Technology and Innovation, Ministry of Higher Education (MoHE), and Malaysian Qualifications Agency.

Policy Process

- AI shapes the higher education policy making process.
- Evidence-informed policymaking has shifted from being a slow, manual process to a more immediate, technology-enabled one.
- Automation in areas such as literature reviews, plagiarism detection, and academic integrity monitoring provides structured evidence that informs policy decisions more efficiently than before.
- AI ensures that evidence is not only seen as a validation tool but as a driver of policy conception and design.

Policy Content

- Higher education policies in Malaysia increasingly reference AI and digital technologies, reflecting their growing role in governance and programme development.
- Recent higher education policies and regulations like the Digital Education Policy, Malaysia Education Blueprint 2015–2025 and the Malaysian Qualifications Agency (MQA) Advisory Note No. 2/2023 on the Use of Generative Artificial Intelligence in Higher Education provide frameworks for adoption of AI in higher education. They acknowledge the need for higher education policies to include provisions for the ethical use of AI in teaching, research, assessment, and curriculum development.
- Higher Education institutions are embedding AI and digital literacy across programmes, especially in STEM and vocational sectors. Curricular reforms are data-driven and responsive to graduate readiness and skills demand.
- Internal university policies and teaching handbooks are evolving to include AI usage standards. Universities and departments use these comparisons to update internal handbooks and guidelines to ensure that policy implementation aligns with evidence trends.

Institutional Capabilities and Systems

- AI and digital tools have accelerated how data is collected, synthesised, and reported. This has diversified the types of evidence policymakers rely on, moving beyond government reports to stakeholder-driven, digitally facilitated inputs.
- It enables rapid synthesis of large datasets and academic outputs, allowing policymakers and stakeholders to access timely insights.
- Policymakers and institutions can access real-time data (e.g., student performance, industry needs, benchmarking studies) much faster than before.
- However, individual and institutional capabilities differ. AI and digital infrastructure remain uneven, with rural and East Malaysian institutions (Sabah, Sarawak) facing connectivity and hardware limitations.

Networks & Relationships

- AI in higher education policy has capabilities to alter existing evidence use ecosystem through alignment and re-alignment of the roles of key stakeholders.
- Digital platforms allow more inclusive consultations, enabling lecturers, students, industry partners, and international collaborators to contribute evidence.
- AI have transformed the evidence use landscape by engaging new non-traditional policy stakeholders. Partnerships with industry (technology firms, AI companies) and international education partners (e.g., China, ASEAN) have transformed the evidence base.

POLICY RECOMMENDATIONS

THE RESEARCH

RECOMMENDS....

1. Invest in targeted, role-specific capacity building (policymakers, researchers, faculty, administrators, and students).

2. Targeted Infrastructure Investment: Provide subsidies for AI-ready infrastructure in underfunded institutions.

3. Scale interoperable national digital platforms with subsidised access models.

4. Institutionalise AI policy sandboxes before national roll-out.

5. Formalise AI ethics and disclosure standards with human verification requirements.

6. Strengthen participatory policy loops to integrate bottom-up evidence.

7. Address rural–urban digital equity gaps systematically.

Contact for Further Information/Collaboration

For ongoing collaboration, research exchange, or policy dialogue related to Malaysia's higher education digital transformation agenda

Ministry of Higher Education Malaysia
https://www.mohe.gov.my/

National AI and Digital Governance Taskforces
https://ai.gov.my

Life Education Academy Malaysia (LEAM)
https://leam.my/home/

Chai Wei Toh, PhD - Research Fellow
tohchaiwei@yahoo.com


POL:EMERGE

Policy Brief

POL-EMERGE

Evidence-Informed Policymaking in Higher Education through Digital Transformation

Key Insights from the Philippines

OBJECTIVE

This policy brief presents evidence-based recommendations for governing Artificial Intelligence (AI) and other emerging technologies in Philippine higher education. It is part of the POL-EMERGE (Policymaking Under Rapid Emergence) collaborative research project involving Malaysia, Thailand, the Philippines, and Vietnam. This brief aims to guide Philippine policymakers, regulators, and higher education leaders in developing a coherent, ethical, and evidence-informed AI governance framework for higher education. It synthesizes legal analysis and stakeholder experiences to identify governance gaps and propose actionable policy measures.

"Translating Insights into Policy Action"

METHODOLOGY

The study combined doctrinal analysis and qualitative interviews. The doctrinal review examined more than thirty national laws, proposed bills, CHED Memorandum Orders, DepEd regional issuances, national development frameworks, and institutional AI policies to assess how AI has altered policy content, governance procedures, and regulatory principles. Twenty-seven interviews with local, regional, and national leaders, education administrators, and students were conducted across Luzon, Visayas, Mindanao, and NCR. Legislative theater workshops among twenty six participants complemented the interviews by simulating AI governance dilemmas, revealing enforcement inconsistencies and participatory policy needs.

KEY FINDINGS

INTERVIEW FINDINGS

Stakeholders report that AI is already integrated into research drafting, data analysis, benchmarking, and administrative analytics. AI has accelerated evidence gathering and reduced bureaucratic delays, contributing to more data-informed policymaking. At the same time, interviews reveal concerns over over-reliance, erosion of critical thinking, generational divides among faculty, unequal regional access, and unclear enforcement standards.

Institutions are crafting "organic" AI policies in the absence of national legislation, resulting in variability across campuses. Overall, openness to AI correlates with increased research productivity and institutional efficiency, but also demands stronger ethical safeguards and capacity-building mechanisms.

DOCTRINAL ANALYSIS

AI governance in the Philippines is distributed rather than centralized. National AI references appear in proposed House and Senate bills, the Philippine Development Plan 2023–2028, and CHED Memorandum Orders on flexible learning and digital transformation, but no unified AI law defines regulatory authority or accountability structures. Universities have moved faster than national legislation. Major HEIs have issued Responsible AI guidelines covering disclosure requirements, academic integrity, data governance, and ethical oversight. Policy principles emerging across documents include transparency, proportionality, fairness, accountability, and human-centered design.

However, policy implementation remains inconsistent. There are no standardized AI disclosure templates, no national threshold for AI-detection scoring, and no unified accreditation framework for AI tools in education.

POLICY RECOMMENDATIONS

The Philippines requires a coordinated, multi-level AI governance framework. The following policy recommendations are designed national, regional, local, and higher education.

"AI is no longer an experimental tool in Philippine higher education. It is a structural governance reality. The absence of a comprehensive national AI law has led institutions to develop fragmented but innovative policies. Without coordination, however, disparities in enforcement, capacity, and ethical safeguards will widen. A coherent strategy requires national legal authority, regional contextualization, institutional operational clarity, ethical and data governance safeguards, and sustained capacity-building. "

Regional-Level Policies

Regional disparities were evident in access, infrastructure, and faculty/teacher readiness.

1. **Establish Regional AI Resource Hubs:**
CHED regional offices should create AI hubs that: provide technical support to HEIs, offer AI literacy workshops, develop contextual AI guidelines for rural institutions, and conduct regional AI policy consultations. These hubs should prioritize low-connectivity areas.

2. **Require Regional AI Readiness Assessments:**
Before mandating AI integration, regional offices should conduct: infrastructure audits, faculty/teacher competency assessments, and student access surveys. Policies should be calibrated to actual readiness levels rather than assumed digital capacity.

3. **Institutionalize Participatory AI Policymaking:**
Regional CHED offices should require annual AI stakeholder consultations, inclusion of student and faculty representation or consultation in AI policy revisions, and public reporting on AI implementation outcomes. These policy can prevent top-down blind implementation.

National-Level Policies

A. **Mandate National AI Academic Integrity Standards:**
The Commission in Higher Education (CHED) should issue a Uniform AI Academic Integrity Framework applicable to all HEIs, including: standardized AI disclosure templates, national guidelines on AI-assisted writing and data analysis, clear definitions distinguishing AI assistance from academic misconduct, and national guidance on acceptable AI similarity thresholds (to prevent arbitrary institutional scoring). This policy will reduce policy fragmentation and inter-university inconsistencies.

B. **Institutionalize AI Capacity-Building Funding:**
The national government should create an faculty development fund for state universities and colleges (SUCs) to support AI literacy training for administrators and regulators, provide funds for interdisciplinary AI ethics research centers and regrants for AI-enhanced institutional research analytics. AI governance cannot succeed without technical and ethical capacity-building.

C. **Integrate AI into National Workforce Strategy:**
Align AI governance with labor and employment policy by: embedding AI literacy in CHED program standards, funding reskilling programs for faculty and civil servants. This policy can address displacement labor and job anxieties.

Institutional-Level Policies

Universities are currently the most proactive governance actors.

Create Institutional AI Technical Working Groups (TWGs):
Every higher education institution (HEI) should establish a TWG composed of: academic leaders, IT specialists, legal officers, ethics experts, and student representatives. The TWG should accredit AI tools, monitor compliance, and review AI-related grievances.

Embed AI Literacy Across the Curriculum:
AI literacy must become a transversal competency. HEIs should integrate critical AI evaluation modules in general education, train students in fact-checking AI outputs, teach ethical AI use in discipline-specific contexts, and require citation training for AI-generated assistance.

Reform Academic Integrity Frameworks:
Institutions should require AI disclosure declarations in theses and research, update plagiarism policies to reflect AI-assisted writing realities, replace punitive detection-only models with educative AI literacy programs and provide faculty/teacher training on evaluating AI-assisted outputs.

Institutionalize Annual AI Policy Reviews:
Given rapid technological change, institutions should conduct yearly AI policy audits, publish AI governance reports and revise guidelines based on empirical evidence and stakeholder feedback.

Contact information for further information or ongoing collaborations
AURELIO P. VILBAR
Professor, College of Social Sciences, University of the Philippines Cebu
Country Representative, Asia Teachers of English as a Foreign Language Officer,
Philippine Association for Language Teaching
Email: apvilbar1@up.edu.ph


POL:EMERGE

Policy Brief

POL-EMERGE

Evidence-Informed Policymaking
in Higher Education through Digital Transformation

Key Insights from Thailand

Introduction

This study examines how Artificial Intelligence (AI) is shaping higher education policymaking in Thailand through three research methods: doctrinal policy analysis, interviews, and legislative theatre. The findings show that Thailand has established formal national and ministerial AI policies (e.g., National AI Action Plan 2022–2027; Digital Strategy Plan; Thai MOOC; AI-powered curriculum auditing); however, the implementation in higher education reflects uneven capacity, varying institutional readiness, and gaps between national vision and operational practice. AI functions both as a policy objective (AI literacy, human capital development) and as a governance tool (digital platforms, automated auditing, evidence systems).

Policy-Making Practices

Top-down strategic planning

- Cabinet-approved national AI framework with 5 strategic pillars
- Alignment with 20-Year National Strategy and Digital Government plans
- Consultative and multi-stakeholder processes
- Public hearings, expert consultations, cross-ministerial committees
- Involvement of academia, private sector, civil society

Evidence-informed

- Use of benchmarking (AI Readiness Index, international comparisons)

Policy is often broad at national level and leaves interpretation to institutions

- Implementation depends heavily on institutional leadership

Early-stage AI governance

- Thailand currently positioned as a "AI user" rather than AI producer

Summary of findings from the research

POL:EMERGE

Policy Content

The study identifies the following major shifts in policy content:

AI integration into education

- AI literacy embedded in curricula.
- Mandatory AI-related credits in higher education.
- AI-based curriculum auditing (e.g., CISA system).
- AI-driven quality assurance and automated compliance checking.

Digital transformation in HE institutions

- Digital University Policy (2021–2027).
- E-transcripts, digital dashboards, online QA systems.
- Cloud systems, automation, digital signatures.

AI governance, ethics, and data protection

- Alignment with UNESCO AI Ethics Framework.
- PDPA compliance requirements.
- Guidelines on academic integrity and AI-generated content.
- Responsible AI and cybersecurity policies.

AI and digital competency frameworks

- National and university AI competency frameworks.
- Digital skills embedded in Thai Qualifications Framework (TQF).
- Workforce alignment with AI, semiconductor, EV, and digital industries.

Online learning and micro-credentials

- Thai MOOC and hybrid learning expansion.
- Credit banks and stacked credentials.
- Flexible lifelong learning pathways.

Policy Process

Technology has significantly changed policymaking processes

Digitalization of administrative workflows

- Replacement of paper-based systems with digital submission platforms.
- AI pre-screening of curriculum and QA documentation.
- Automated dashboards for monitoring institutional performance.

Real-time analytics and decision support

- Continuous data submission from HEIs to ministries.
- AI-supported trend analysis and predictive modeling.

Evidence-informed policy formulation

- Pilot studies and AI trials before scaling.
- Benchmarking against UNESCO, OECD, EU, and Singapore models.
- Practice-informed policy based on usage tracking.

Networks and Relationships

Transformative technologies have strengthened multi-level and cross-sector networks

Cross-ministry collaboration

- Across Ministry of Higher Education, Science, Research and Innovation (MHESI), Ministry of Education (MOE), Office of National Higher Education Science Research and Innovation Policy Council (NXPO), Ministry of Digital Economy and Society (MDES).
- Joint committees aligning 12-year and higher education skills.

Public–private partnerships

- AI University initiatives.
- University-industry collaboration for workforce skills alignment.
- Innovation centers supporting AI ecosystem development.

National digital platforms

- Thai MOOC.
- Thailand Library Consortium.

International networks

- UNESCO AI Ethics Recommendation.
- OECD, EU, Singapore, Japan frameworks.
- Global benchmarking in AI governance.

Institutional Capabilities and Systems

Systems

- AI-enabled curriculum auditing (CISA).
- HE Service digital submission platform.
- Digital repositories (iThesis, institutional repositories).
- Thai MOOC automated credential systems
- Standardized national data collection systems.
- Digital Maturity Models (DMM).
- AI-assisted evidence screening and compliance systems.

Capability

- National Target: 10,000+ AI professionals
- University-level AI training programs
- Growth in AI literacy but mostly at "user level"

Constraints

- Risk of AI hallucinations and fabricated citations.
- Data privacy concerns (PDPA compliance).
- Uneven infrastructure and readiness.
- Over-reliance without critical verification.
- Lack of enforcement mechanisms for AI misuse
- Political discontinuity affecting long-term strategy

POLICY RECOMMENDATIONS

Close the AI access gap

- Establish nationally funded shared access to paid-tier AI tools (consortium model similar to UNINET/database subscriptions).
- Reduce inequality between urban and rural institutions and between free vs. paid AI tools.
- Provide centralized licensing to ensure equitable AI capability across HEIs.

Develop a national AI roadmap for higher education

- Create a phased roadmap (short-, medium-, and long-term: 2–10 years).
- Align AI in education with workforce development, digital economy strategy, and national innovation goals.
- Clarify measurable milestones and readiness indicators.

Build closed and secure AI systems

- Encourage universities to develop secure institutional AI environments.
- Reduce risks of data leakage to external AI platforms.
- Establish protocols for handling sensitive research and student data.

Institutionalize AI sandboxes

- Establish sectoral AI sandboxes for higher education (inspired by Singapore's civil-service model).
- Pilot AI applications in controlled environments before national roll-out.
- Use pilot evidence to inform future regulation and funding decisions.

Strengthen AI governance and regulatory clarity

- Move from general guidelines toward clearer "do and don't" standards where appropriate.
- Define accountability roles for AI use in teaching, research, and administration.
- Integrate enforceable PDPA compliance and data-protection protocols.
- Develop clear national standards for AI use in academic integrity and assessment.

Make policy learning continuous and data-driven

- Issue official AI accounts to users and log institutional AI usage.
- Collect course-level use-cases and operational data to inform iterative policy improvement.
- Embed real-time analytics into ministry-level monitoring systems.

Expand targeted capacity-building programs

- Move beyond generic AI training toward role-differentiated programs (faculty, students, administrators, policymakers).
- Integrate AI literacy and competency outcomes into national curriculum frameworks.
- Provide continuous professional development aligned with Electronic Transactions Development Agency (ETDA) capacity-building pillars.

Establish AI clinics and advisory centers

- Create national and university-level AI help centers.
- Offer advisory services on tool selection, risk assessment, compliance, and ethical use.
- Publish FAQs, decision trees, and case guidance documents.

Promote ecosystem-based governance

- Strengthen cross-ministerial coordination (MHESI, MOE, NXPO, MDES, ETDA).
- Encourage bottom-up policy feedback loops from universities.
- Support expert networks and international benchmarking (e.g., UNESCO frameworks).

Strengthen public–private and innovation partnerships

- Develop AI innovation centers in collaboration with industry.
- Support commercialization pathways and applied AI research.
- Promote Thailand's transition from AI "user" to AI "producer."

Embed verification and human oversight norms

- Require human verification and source citation for AI-generated outputs.
- Promote the norm of "AI-assisted but human-led" decision-making.
- Institutionalize ethical AI committees and review mechanisms.

Enhance digital infrastructure and interoperability

- Expand cloud-first integration and reduce redundant systems across ministries.
- Standardize compulsory national data collection to support monitoring and planning.
- Improve infrastructure readiness in lower-capacity institutions.

Contact information for further information or ongoing collaborations

ASSOC. PROF. SIRILAK BANGCHOKDEE
Prince of Songkla University, Thailand
Email: sirilak.ba@psu.ac.th

ASSOC PROF. OPHAT KAOSAIYAPORN
Director of KYL learning resources center, Prince of Songkla University, Thailand
Email: ophat.k@psu.ac.th


POL:EMERGE

Policy Brief
POL-EMERGE

Evidence-Informed Policymaking
in Higher Education through Digital Transformation

Key Insights from Vietnam

POL:EMERGE

Introduction

Vietnam is accelerating national digital transformation to build digitally competent, inclusive and innovation-driven society. The higher education sector has also evolved to transform into a pillar in the national innovative ecosystem, which not only ensures the human resource development but also fosters scientific research, technology transfer and to meet the requirements of the 4.0 industrial revolution and the national digital transformation process.

This report presents key findings on how digital transformation and AI are reshaping education governance and policymaking in Vietnam. The research reveals a transition toward centralized data systems, AI-supported analytics, cross-sector integration, and the emergence of a data-driven

governance culture. At the same time, it identifies gaps in institutional capacity, legal frameworks, and local implementation, and recommends strengthening contextualized AI policies, enhancing digital and analytical competencies, investing in equitable infrastructure, and establishing clear ethical and regulatory mechanisms to ensure inclusive and sustainable reform.

Summary
of findings from the research

Policy content

Vietnam has been calling for comprehensive digital transformation, aiming to build a society with widespread digital competence. Education is oriented towards openness, equality, focusing on standardization, modernization, and international integration.

Strong development of digital learning and data infrastructure

- National Education Data Platform (HEMIS)
- Integrated data sharing system between ministries, sectors, and localities
- Data centers, cloud computing, AI, IoT
- Smart learning infrastructure (digital libraries, virtual classrooms, VR/AR)

Changing the roles and responsibilities of institutions

- Policies are shifting to an adaptive governance model, continuously updated according to technological and social changes. The roles of ministries, departments, educational institutions, and innovation organizations are restructured towards network coordination, based on data and technology.

Strengthening cooperation:

- Cooperation between the state, technology companies, educational institutions, and social organizations
- International linkages with technology corporations, research organizations, and international donors
- Joint development of training content, digital infrastructure, and innovation ecosystems

Towards transparent, secure, and inclusive digital transformation

- Narrowing the digital divide between regions and social groups
- Equitable access for disadvantaged groups
- Developing human-centered AI
- Enhancing cybersecurity, data protection, AI ethics, and academic integrity

Summary of findings from the research

POL:EMERGE

Policy process

- Technology is reshaping how evidence is collected, processed, and used, shifting from manual, decentralized processes to centralized, automated, and big-data-driven systems. Technology enables state agencies, particularly at the Ministry level, to build centralized database (DB) systems. This changes the information gathering process from being decentralized across individual units to a single portal, which helps standardize and accelerate evidence processing.
- Technology, particularly AI, is changing the process from merely "collecting" evidence to "simulating" and "forecasting" based on evidence. AI helps policymakers analyze large datasets to identify trends, simulate impacts, and forecast risks, thereby enabling evidence-based and data-driven decision-making—a task previously difficult to perform manually.
- **Evidence Collection & Monitoring:** Nationwide surveys, digital monitoring systems, periodic evaluations with rapid feedback.
- **Cross-Sector Integration:** Data sharing between MOET, ministries, local departments, and international partners.
- **Analytical Tools:** Deployment of AI/big data analytics for modeling, scenario planning, and impact forecasting.

"Translating Insights into Policy Action"

Institutional capabilities and systems

Technology has changed the capability to use evidence or research:

- Training & Upskilling: Programs for AI, data analytics, and research application targeting officials, educators, and students.
- Institutional Capacity: Development of centers of excellence, digital experts pool, and integrated education operation centers.
- Resource Access: Expansion of electronic libraries and open educational platforms for research and policymaking.
- Technology enables individuals and organizations to access vast amounts of information, enhancing the speed, accuracy, and depth of information processing. This boosts work productivity and output quality, supporting information-based decision-making. By saving time on simple information processing and synthesis through AI, humans can focus resources on developing higher-order thinking skills such as critical thinking, creativity, flexible problem-solving, and interpersonal communication.

Technology has changed governmental or institutional norms or values of using evidence or research:

- Evidence as Cultural Norm: Embedded in digital transformation governance and recognized as critical for policymaking.
- Standardization & Benchmarking: Adoption of international standards for curricula, competencies, and resources.
- Recognition & Incentives: Awards and commendations for successful models to encourage best practice sharing
- Technology is fostering an emerging "Data Culture," which is gradually replacing experience-based decision-making. This new culture demands that policies be based on an "evidence base," "data," "figures," and specific research. With the formation of an evidence-based governance model, using evidence is no longer just a technical requirement but has become a core principle of transparent, accountable, and sustainable governance.

There are limitations in policy formulation, legal framework, AI governance system, leadership mindset, human and implementation capacity.

Networks and relationships

- Collaborative Ecosystems: Tripartite partnerships between government, universities, and enterprises for AI training, research, and innovation.
- Global Linkages: Faculty exchanges, joint research, and shared educational resources with international institutions.
- Integrated Data Networks: Linking HEIs with national data platforms for shared access and evidence-based governance
- Technology platforms enable government agencies to quickly connect with and gather input from experts, universities, and associations, overcoming physical barriers and traditional limitations. This enhances academic, expert, and policymaker networks, making them more multidisciplinary and multidimensional, facilitating more effective resource sharing, and contributing to more effective policymaking.

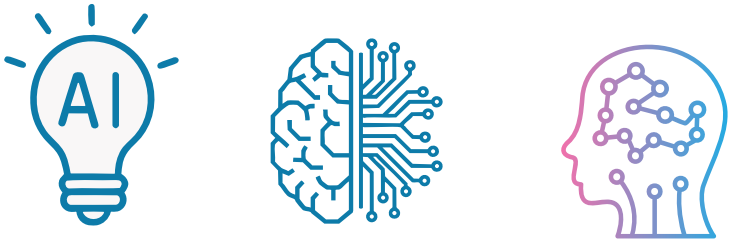
Policy recommendations

THE PROJECT RECOMMENDS...

Design AI policies and implement them in a way that suits the specific characteristics of each locality; prioritize investment in technology infrastructure for remote and disadvantaged areas; strengthen policy analysis capacity and autonomy for local authorities.

Enhance digital skills and critical thinking; build a clear legal framework and data governance mechanism for AI in management, research, and teaching; develop open data systems and promote interdisciplinary cooperation.

Integrate AI through capacity building, innovative pedagogical methods, and the issuance of regulations ensuring ethics, safety, and sustainability.



Contact information for further information or ongoing collaborations
Assoc. Prof. Dr. Nguyen Thanh Lam
Email: lamnt@lhu.edu.vn
Vice Rector - Lac Hong University

Bản tóm tắt chính sách
POL-EMERGE

Hoạch định chính sách dựa trên bằng chứng trong giáo dục Đại học thông qua chuyển đổi số

Góc nhìn từ Việt Nam.

POL:EMERGE

Giới thiệu

Việt Nam đang đẩy mạnh tiến trình chuyển đổi số quốc gia nhằm xây dựng một xã hội có năng lực số toàn diện, bao trùm và hướng tới đổi mới sáng tạo. Lĩnh vực giáo dục đại học cũng đang chuyển mình để trở thành một trụ cột trong hệ sinh thái đổi mới sáng tạo quốc gia, không chỉ bảo đảm phát triển nguồn nhân lực mà còn thúc đẩy nghiên cứu khoa học, chuyển giao công nghệ, đáp ứng yêu cầu của Cách mạng công nghiệp lần thứ tư và tiến trình chuyển đổi số quốc gia.

Báo cáo này trình bày những phát hiện chính về cách thức chuyển đổi số và trí tuệ nhân tạo (AI) đang tái định hình uá trình quản trị và hoạch định chính sách giáo dục tại Việt Nam. Kết quả nghiên cứu cho thấy xu hướng chuyển dịch sang các hệ thống dữ liệu tập trung, phân tích được hỗ trợ bởi AI, tích hợp liên ngành và sự

hình thành văn hóa quản trị dựa trên dữ liệu. Đồng thời, báo cáo cũng chỉ ra những khoảng trống về năng lực, khung pháp lý và cách thức triển khai ở địa phương; từ đó kiến nghị tăng cường xây dựng chính sách AI phù hợp với bối cảnh, nâng cao năng lực số và năng lực phân tích, đầu tư hạ tầng mang tính công bằng, và thiết lập cơ chế liên quan đến đạo đức và quản lý nhằm bảo đảm quá trình chuyển đổi diễn ra một cách toàn diện và bền vững.

Tóm tắt
các phát hiện từ nghiên cứu

Nội dung
Chính sách

Việt Nam đã và đang yêu cầu chuyển đổi số toàn diện, hướng tới xây dựng một xã hội có năng lực số phổ cập. Giáo dục được định hướng theo hướng mở, bình đẳng, chú trọng chuẩn hóa, hiện đại hóa và hội nhập quốc tế.

Phát triển mạnh các hạ tầng học tập và dữ liệu số:

- Nền tảng dữ liệu giáo dục quốc gia (HEMIS)
- Hệ thống tích hợp, chia sẻ dữ liệu giữa các bộ, ngành và địa phương
- Trung tâm dữ liệu, điện toán đám mây, AI, IoT
- Hạ tầng học tập thông minh (thư viện số, phòng học ảo, công nghệ thực tế ảo và thực tế tăng cường)

Thay đổi vai trò và trách nhiệm của các thể chế

- Chính sách chuyển sang mô hình quản trị thích ứng, cập nhật liên tục theo biến động công nghệ – xã hội. Vai trò của các bộ, ngành, cơ sở giáo dục và tổ chức đổi mới được tái cấu trúc theo hướng phối hợp mạng lưới, dựa trên dữ liệu và công nghệ

Tăng cường hợp tác:

- Hợp tác giữa nhà nước, doanh nghiệp công nghệ, cơ sở giáo dục và các tổ chức xã hội
- Liên kết quốc tế với các tập đoàn công nghệ, tổ chức nghiên cứu, nhà tài trợ quốc tế
- Đồng phát triển nội dung đào tạo, hạ tầng số và hệ sinh thái đổi mới sáng tạo

Hướng tới chuyển đổi số minh bạch, an toàn và bao trùm

- Thu hẹp khoảng cách số giữa các vùng miền và nhóm xã hội
- Tiếp cận công bằng cho nhóm yếu thế
- Phát triển AI lấy con người làm trung tâm
- Tăng cường an ninh mạng, bảo vệ dữ liệu, đạo đức AI và liêm chính học thuật

Tóm tắt các phát hiện từ nghiên cứu

Quy trình Chính sách

- Công nghệ đang tái định hình cách thức thu thập, xử lý và sử dụng bằng chứng, chuyển từ quy trình thủ công, phân tán sang hệ thống tập trung, tự động hóa và dựa trên dữ liệu lớn. Công nghệ cho phép các cơ quan nhà nước, đặc biệt ở cấp Bộ, xây dựng hệ thống cơ sở dữ liệu (CSDL) tập trung, thay đổi quá trình thu thập thông tin từ phân tán tại từng đơn vị sang cổng thông tin thống nhất, góp phần chuẩn hóa và đẩy nhanh xử lý bằng chứng.
- Công nghệ, đặc biệt là AI, chuyển đổi quy trình từ "thu thập" sang "mô phỏng" và "dự báo" dựa trên bằng chứng. AI hỗ trợ nhà hoạch định chính sách phân tích khối lượng dữ liệu lớn nhằm xác định xu hướng, mô phỏng tác động và dự báo rủi ro, qua đó thúc đẩy việc đưa ra quyết định dựa trên bằng chứng và dữ liệu – nhiệm vụ trước đây khó thực hiện bằng phương pháp thủ công.
- **Thu thập và giám sát bằng chứng**: Khảo sát toàn quốc, hệ thống giám sát số, đánh giá định kỳ với cơ chế phản hồi nhanh.
- **Tích hợp liên ngành:** Chia sẻ dữ liệu giữa Bộ Giáo dục và Đào tạo (MOET), các bộ, sở địa phương và đối tác quốc tế.
- **Công cụ phân tích:** Triển khai phân tích AI/dữ liệu lớn phục vụ mô hình hóa, xây dựng kịch bản và dự báo tác động.

Hệ thống thể chế và Năng lực

Công nghệ đã thay đổi năng lực sử dụng bằng chứng và nghiên cứu:

- Đào tạo và nâng cao năng lực: Tăng cường chương trình đào tạo về AI, phân tích dữ liệu và ứng dụng nghiên cứu dành cho cán bộ quản lý, giảng viên và sinh viên.
- Năng lực thể chế: Phát triển các trung tâm trọng điểm, đội ngũ chuyên gia số và trung tâm điều hành giáo dục tích hợp.
- Tiếp cận nguồn lực: Mở rộng thư viện điện tử và nền tảng giáo dục mở phục vụ nghiên cứu và hoạch định chính sách.
- Công nghệ giúp cá nhân và tổ chức tiếp cận lượng thông tin lớn, nâng cao tốc độ, tính chính xác và chiều sâu xử lý thông tin; qua đó tăng năng suất lao động và chất lượng đầu ra, hỗ trợ ra quyết định dựa trên thông tin. Nhờ tiết kiệm thời gian xử lý và tổng hợp thông tin nhanh chóng bằng AI, con người có thể tập trung vào phát triển các năng lực tư duy bậc cao như tư duy phản biện, sáng tạo, giải quyết vấn đề linh hoạt và giao tiếp liên cá nhân.

Công nghệ cũng thay đổi chuẩn mực và giá trị trong việc sử dụng bằng chứng và nghiên cứu:

- Bằng chứng như một chuẩn mực văn hóa: Được lồng ghép trong quản trị chuyển đổi số và được thừa nhận là yếu tố then chốt trong hoạch định chính sách.
- Chuẩn hóa và đối sánh: Áp dụng tiêu chuẩn quốc tế về chương trình đào tạo, năng lực và nguồn lực.
- Ghi nhận và khuyến khích: Tổ chức trao giải thưởng và bằng khen cho các mô hình triển khai hiệu quả, qua đó thúc đẩy việc chia sẻ và lan tỏa các kinh nghiệm điển hình.
- Công nghệ đang thúc đẩy hình thành "văn hóa dữ liệu", dần thay thế mô hình ra quyết định dựa trên kinh nghiệm. Văn hóa mới này đòi hỏi chính sách phải dựa trên "cơ sở bằng chứng", "dữ liệu", "số liệu" và nghiên cứu cụ thể. Khi mô hình quản trị dựa trên bằng chứng được thiết lập, việc sử dụng bằng chứng không chỉ là yêu cầu kỹ thuật mà trở thành nguyên tắc cốt lõi của quản trị minh bạch, có trách nhiệm và bền vững.

Tuy nhiên, vẫn tồn tại những hạn chế trong xây dựng chính sách, khung pháp lý, hệ thống quản trị AI, tư duy lãnh đạo, năng lực nhân sự và năng lực triển khai.

Mạng lưới và Quan hệ hợp tác

- Hệ sinh thái hợp tác: Hình thành quan hệ đối tác ba bên giữa Nhà nước – trường học – doanh nghiệp trong đào tạo, nghiên cứu và đổi mới sáng tạo về AI.
- Liên kết toàn cầu: Trao đổi giảng viên, hợp tác nghiên cứu và chia sẻ tài nguyên giáo dục với các cơ sở quốc tế.
- Mạng lưới dữ liệu tích hợp: Kết nối các cơ sở giáo dục đại học với nền tảng dữ liệu quốc gia nhằm chia sẻ truy cập và thúc đẩy quản trị dựa trên bằng chứng.
- Nền tảng công nghệ cho phép cơ quan quản lý nhanh chóng kết nối và thu thập ý kiến từ chuyên gia, các trường đại học và hiệp hội, vượt qua rào cản địa lý và hạn chế truyền thống. Điều này góp phần tăng cường mạng lưới học thuật, chuyên gia và nhà hoạch định chính sách theo hướng đa ngành, đa chiều; tạo điều kiện chia sẻ nguồn lực hiệu quả hơn và nâng cao chất lượng hoạch định chính sách.

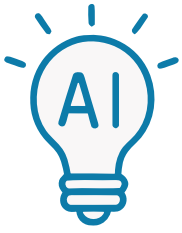
Khuyến nghị chính sách

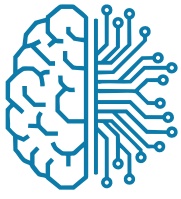
CÁC ĐỀ XUẤT TỪ DỰ ÁN...

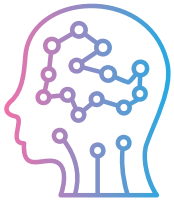
Thiết kế chính sách và triển khai áp dụng AI phù hợp với đặc thù từng địa phương; ưu tiên đầu tư hạ tầng công nghệ cho vùng sâu, vùng xa; bồi dưỡng năng lực phân tích chính sách và quyền tự chủ cho cấp địa phương.

Nâng cao năng lực số và tư duy phản biện; xây dựng khung pháp lý và cơ chế quản trị dữ liệu rõ ràng cho AI trong quản lý – nghiên cứu – giảng dạy; phát triển hệ thống dữ liệu mở và thúc đẩy hợp tác liên ngành.

Tích hợp AI thông qua đào tạo năng lực, đổi mới phương pháp sư phạm và ban hành quy định nhằm đảm bảo đạo đức, an toàn và bền vững khi ứng dụng AI.







Thông tin liên hệ để biết thêm chi tiết hoặc hợp tác
PGS.TS. Nguyễn Thanh Lâm
Email: lamnt@lhu.edu.vn
Phó Hiệu trưởng – Trường Đại học Lạc Hồng