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How Colleges and Universities are Adopting AI in Higher Education: A Global Comparative Analysis

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Artificial intelligence (AI) and generative AI have become central strategic priorities for universities worldwide, yet the extent to which institutions formally embed AI into their governance, academic, and policy structures remains unclear. This study examines the institutionalization of AI across a global sample of research universities drawn from the Times Higher Education 2026 World University Rankings. Adopting a mixed-methods design, the study combines the construction of an AI Institutionalization Index (AIII), which is based on 20 indicators of governance, curriculum, policy, and institutional support. The findings reveal that AI institutionalization is uneven and stratified. While most universities demonstrate moderate levels of integration—primarily through research centers, academic programs, and policy statements—only a small subset achieves comprehensive institutionalization across governance, curriculum, and organizational practices. Notably, AIII scores are not significantly associated with global university rankings, suggesting that AI adoption is not driven by traditional prestige hierarchies. Significant regional variation is also observed, with North American institutions exhibiting higher levels of institutionalization than their European and Asian counterparts do. Interpreted through a critical lens, these findings highlight a disjuncture between the widespread discursive framing of AI as transformative and its more limited structural implementation. This study contributes to the literature by offering a novel comparative framework for analyzing technological change in higher education and underscores the need to move beyond symbolic adoption toward deeper institutional transformation. Implications for policy and research are discussed.

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How Colleges and Universities are Adopting AI in Higher Education: A Global Comparative Analysis

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Abstract: Artificial intelligence (AI) and generative AI have become central strategic priorities for universities worldwide, yet the extent to which institutions formally embed AI into their governance, academic, and policy structures remains unclear. This study examines the institutionalization of AI across a global sample of research universities drawn from the *Times Higher Education* 2026 World University Rankings. Adopting a mixed-methods design, the study combines the construction of an AI Institutionalization Index (AIII), which is based on 20 indicators of governance, curriculum, policy, and institutional support. The findings reveal that AI institutionalization is uneven and stratified. While most universities demonstrate moderate levels of integration—primarily through research centers, academic programs, and policy statements—only a small subset achieves comprehensive institutionalization across governance, curriculum, and organizational practices. Notably, AIII scores are not significantly associated with global university rankings, suggesting that AI adoption is not driven by traditional prestige hierarchies. Significant regional variation is also observed, with North American institutions exhibiting higher levels of institutionalization than their European and Asian counterparts do. Interpreted through a critical lens, these findings highlight a disjuncture between the widespread discursive framing of AI as transformative and its more limited structural implementation. This study contributes to the literature by offering a novel comparative framework for analyzing technological change in higher education and underscores the need to move beyond symbolic adoption toward deeper institutional transformation. Implications for policy and research are discussed.

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Introduction

Artificial intelligence (AI), particularly generative AI, is rapidly changing how people learn, teach, conduct research, work, and prepare for their futures (Papadimitriou et al., 2025). As students, faculty, staff, and academic leaders navigate these changes, colleges and universities around the world are moving beyond small-scale experimentation toward coordinated, institution-wide approaches that seek to align AI innovation with their missions, values, and responsibilities to their communities (Agarwal et al., 2026; OECD, 2026).

For students, one of the most visible signs of this shift is the growing number of academic programs designed to prepare them for an AI-driven workforce (CHEPP, 2026a). In the United States, institutions such as Morgan State University, Bowie State University, Southern Illinois University Carbondale, Michigan Technological University, and Idaho State University are launching new bachelor's degree programs in AI beginning in Fall 2026. At the Massachusetts Institute of Technology (MIT), the AI and decision-making major have reportedly become the university's second most popular undergraduate program (*The New York Times*, 2025). Similar developments are occurring internationally. Nanyang Technological University (NTU) Singapore is launching four new master's programs in 2026 to help professionals navigate the opportunities and challenges of an increasingly AI-driven economy (NTU, 2025), while The Hong Kong Polytechnic University (HKPU) plans to introduce a Doctor of Business Artificial Intelligence (DBAI) degree in January 2027 (HKPU, 2026). Beyond degree programs, universities are also creating spaces for researchers and communities to examine how AI is affecting people and societies. For example, the Centre for AI Futures at SOAS, University of London, has established a research hub examining AI's implications for the Global South (Reuters, 2026).

In other words, these developments suggest that higher education is responding not simply to advances in technology, but also to growing demand from students, professionals, researchers, and communities for opportunities to understand and work with AI (Reimers et al., 2026; Robert, 2026). Yet, while public conversations often portray AI as both inevitable and transformative, we know considerably less about how universities are embedding AI into the structures, programs, policies, and practices that shape the everyday experiences of the people they serve (Crompton et al., 2026; Rudko et al., 2025).

This study examines how leading global research universities construct and institutionalize AI through both formal organizational arrangements and public institutional discourse. To date, some research has catalogued AI adoption polices at top universities (Parker et al., 2025); however, little has suggested which markers or criteria institutions of higher education have selected to integrate AI into their academic culture (Dai et al., 2026; Reimers et al., 2026). Furthermore, with the exception of an AI scale (Li & Wang, 2025), no research has formally developed an index or inventory to explain the variety of approaches colleges and universities have used AI to educate and train faculty, staff, and students.

The development of an AI institutional index is needed to address the absence of a systematic and comparable measure of how universities are integrating AI across core institutional domains (Şen et al., 2026). Existing research on AI in higher education largely focuses on isolated initiatives—such as teaching tools or research applications—without capturing the broader organizational transformation of governance, curriculum, and policy (Pireci Sejdiu & Sejdiu, 2025). This study provides a structured framework to move beyond anecdotal or case-based evidence, enabling cross-institutional and global comparisons. The paper also allows teacher-scholars and policymakers to identify patterns of stratification, gaps in implementation, and areas for improvement. Ultimately, the establishment of an AI institutional index advances the field of higher education administration by offering a replicable tool for assessing the depth and coherence of AI integration in higher education systems. Thus, this study seeks to answer the following research questions:

1) How is artificial intelligence (AI) being institutionalized across global universities, and to what extent do institutional discourses align with the structural integration of AI in governance, curriculum, and policy?

To address this research question, the study employed cross-national content analysis to examine how leading research universities publicly construct and institutionalize AI through their official websites. Furthermore, the study seeks to uncover how institutions of higher education operationalize their AI institutionalization efforts around the world. By analyzing universities across multiple national contexts, this study investigates the relationship between discursive positioning and structural adoption, offering insight into whether AI functions as a deeply integrated institutional transformation or as a mechanism of legitimacy within an increasingly competitive global higher education landscape.

Literature Review

Artificial intelligence (AI) has rapidly emerged as a central focus of higher education, reshaping teaching, research, and administrative policies (Alqahtani & Wafula, 2025; CHEPP, 2026b; Humble & Mozelius, 2026). Universities have increasingly adopted AI technologies for applications such as adaptive learning systems, research analytics, and campus services (e.g., chatbots and automated advising) (Labadze et al., 2023). Beyond operational uses, institutions have also expanded AI-related academic offerings, including degree programs, certificates, and interdisciplinary research centers. This expansion reflects broader societal and economic pressures, as universities position themselves as key actors in preparing students for AI-driven labor markets and knowledge economies (Popow, 2026). However, existing research often emphasizes technological innovation and pedagogical applications, with less attention given to how AI is institutionally embedded across the governance, curriculum, and policy domains (Anthony & Sharma, 2025; Parker et al., 2025).

AI Research in Global Higher Education

The rapid integration of AI and generative AI into higher education has created an urgent need for institutions to perform new formal and informal research that addresses teaching, learning, research, and innovation (Carden & Freeman, 2025; Lin et al., 2024; Popenici et al. 2025). Dai et al. (2026) reported that research interest in AI and generative AI is accelerating worldwide, with the U.S., China, and the UK leading in publication output, while participation from non-Western scholars and institutions is increasing. Using a bibliometric analysis of 2762 articles from the Web of Science Core Collection, Dai et al. (2026) reported that AI research has clustered on topics related to academic integrity, ethical concerns, student learning, teacher practice, and policy development, each reflecting distinct facets of how AI intersects with higher education. In a similar study, Wu (2026) provided evidence of exponential publication growth and high international collaboration on AI, dominated by China and the USA. The author conducted a bibliometric analysis on 1,094 articles published between 2010 and 2024 and identified several themes that have emerged, such as AI methodologies (machine learning (ML), deep learning (DL), natural language processing (NLP)), innovation contexts (patent analysis, technology trends), and integrated science of science methods (bibliometrics, scientometrics). In other words, several research studies suggest that AI research is increasingly vital for knowledge

discovery, how decisions are made, and how power circulates, especially in multilingual and non-Western contexts (Singh & Ramachandran, 2025).

Institutional Responses to Technological Change

The adoption of AI in higher education can be understood through the lens of institutional theory, which highlights how organizations respond to external pressures through processes of adaptation, imitation, and differentiation (Verma & Dhaigude, 2025). Universities historically respond to technological change—such as the rise of online learning and massive open online courses (MOOCs)—by incorporating new structures and practices while maintaining core organizational logics (Laufer et al., 2025). These responses are often shaped by isomorphic pressures, including competition, regulation, and professional norms, which encourage convergence across institutions (Rudko et al., 2025). Moreover, variation persists because of differences in resources, leadership priorities, and national context (Altbach, 2016). AI adoption thus represents not only a technological shift but also an organizational transformation, raising questions about the extent to which institutions move beyond symbolic adoption toward deeper structural change (Jin et al., 2025).

Governance, Curriculum, and Policy in AI Integration

A growing body of literature examines how universities are integrating AI through governance structures, curricular innovation, and institutional policy (Abbasi et al., 2025; Crompton et al., 2026). Governance responses include the establishment of AI task forces, leadership roles (e.g., Chief AI Officers), and strategic plans that articulate institutional priorities (Attard-Frost & Lyons, 2025). Curricular integration involves the development of AI degree programs, interdisciplinary courses, and, in some cases, efforts to promote AI literacy across disciplines. Policy frameworks—particularly those addressing academic integrity, ethical AI use, and data governance—have also become increasingly prominent (Francis et al., 2025). Despite these developments, research suggests that integration is often uneven, with many institutions emphasizing research and programmatic expansion while lagging in the development of comprehensive governance structures and universal curricular requirements (Parker et al., 2025).

Just as computer literacy became a basic life skill, AI literacy must be treated as foundational learning—starting early, ethically guided, and inclusively designed (Annapureddy et al., 2024;). For instance, Jin et al. (2025) reported that many colleges and universities proactively address generative AI integration by emphasizing academic integrity, enhancing

teaching and learning practices, and promoting equity. Using diffusion of innovations theory to examine generative AI adoption strategies in higher education across 40 universities from six global regions, Jin et al. (2025) recommend that institutions of higher education should develop new policies to ensure the development of guidelines for ethical AI use, the design of authentic assessments to mitigate misuse, and the provision of training programs for faculty and students to foster AI literacy. Similarly, Parker et al. (2026) surveyed over 300 U.S. students and found significant growth in the use of AI for assessment preparation and studying. Parker et al. (2026) emphasized the need for teacher education programs to incorporate AI training and address ethical concerns comprehensively and formally. In other words, while AI adoption often occurs through a bottom-up approach in which students, faculty, and staff experiment with and integrate AI tools first, new studies suggest that an expression of clear priorities from institutional leadership matters (Hojeij, 2025; Jin et al., 2025).

Global Stratification and Inequality in Higher Education

Higher education operates within a globally stratified system shaped by rankings, resource distributions, and geopolitical contexts (Hazelkorn, 2015). Elite institutions often possess a greater capacity to invest in emerging technologies, attract talent, and shape global agendas (Levine & Van Pelt, 2026). Moreover, global competition can drive institutions to adopt similar strategies, leading to convergence in areas such as research priorities and academic programming (Altbach, 2016). However, prior research highlights persistent inequalities, as not all institutions are equally positioned to implement large-scale innovations (Jin et al., 2025). The adoption of AI may therefore reinforce or reshape existing hierarchies, depending on how institutions allocate resources and prioritize integration (Schmidt et al., 2025). Understanding AI institutionalization requires situating it within this broader context of global stratification and uneven development (Marginson, 2016).

Gaps in the Literature

Despite the growing interest in AI in higher education, several important gaps remain. First, existing studies tend to focus on individual institutions or specific applications rather than offering comprehensive, comparative analyses across universities and regions (Qian & Bowman, 2026). Second, there is a lack of systematic measurement tools for assessing the extent of AI institutionalization, limiting the ability to compare institutions empirically (Popenici et al., 2025). Third, few studies explicitly connect discursive representations of AI with structural

implementation, leaving unanswered questions about the relationship between institutional rhetoric and practice (UNESCO, 2025).

Hence, this research fills this gap by developing a novel tool for assessing AI institutionalization. The presence of AI institutes, policies, and leadership roles can function as organizational signals that position institutions as future-oriented and technologically sophisticated. Thus, this study expands Parker et al. (2025) by providing one of the first systematic, comparative, and global analyses of how AI is institutionally embedded across universities.

Research Questions and Hypotheses

Two research questions are proposed in this study:

1) To what extent are artificial intelligence (AI) initiatives institutionalized across global research universities in terms of governance, curriculum, policy, and institutional support?
2) How do colleges and universities discursively construct AI around the world

The research puts forth the subsequent hypotheses:

H1

Significant regional differences will exist in AI institutionalization across global research universities.

H2

Universities' public discourses about AI will reflect stronger commitments to innovation and transformation than are evidenced by their formal institutional structures.

Methods and Methodology

Research Design

This study employs a comparative, mixed-methods research design to examine how artificial intelligence (AI) is institutionalized across global research universities. The quantitative component involves constructing and analyzing 20 coded indicators, while the qualitative component draws institutional websites to interpret how universities frame and communicate AI in texts. The sample consists of the top 100 universities drawn from the *Times Higher Education* 2026 World University Rankings, ensuring representation across major geographic regions (e.g., North America, Europe, Asia, and Oceania) (Appendix A). Specifically, the websites of all 100 universities in the sample were systematically reviewed one by one between January 2026 and

May 2026, with attention to publicly available materials such as strategic plans, academic program descriptions, policy statements, and institutional announcements. Through this process, the analysis focused on identifying recurring discursive themes—such as "innovation," "global leadership," and "AI transformation"—and how these narratives are used to frame institutional priorities.

Quantitative analysis includes descriptive statistics, correlation analysis, and regional comparisons, whereas texts from institutional websites are used to interpret how institutional discourse aligns with or diverges from observed structural practices. This research design allows for both broad comparative analysis and theoretically grounded interpretation, offering a comprehensive understanding of AI institutionalization in higher education.

Data Creation

The study used the Artificial Intelligence Institutionalization Index (AIII), a new comprehensive database developed by the author that identifies and evaluates the significant ways in which higher education institutions operationalize their AI institutionalization efforts to make mission, marketing, curriculum, cocurricular, and other decisions. The AIII was constructed through a systematic, theory-informed process designed to capture the multidimensional nature of AI integration in higher education. Specifically, an initial pool of indicators was developed based on an extensive review of the literature on technological adoption, institutional theory, and artificial intelligence in higher education, as well as policy reports from international organizations (e.g., OECD, UNESCO). Guided by the literature, I found that AI institutionalization was conceptualized as occurring across four core domains: governance (e.g., AI leadership roles, task forces), academic structures (e.g., degree programs, departments, curricular requirements), policy frameworks (e.g., faculty and student AI policies), and institutional supports (e.g., professional development, AI-enabled services) (Dai et al., 2026; Xu & Thien, 2026). These domains reflect both the structural and discursive dimensions of institutional change.

Indicators of Interests

A total of 20 indicators were identified and selected to ensure conceptual coverage across the four core domains while remaining observable and verifiable through publicly available institutional data. The use of 20 indicators allows for a more comprehensive and multidimensional assessment of AI institutionalization, capturing governance, curriculum, policy,

and institutional support in a way that a smaller set of indicators could not adequately represent. Reducing the number of indicators to 5 or 10 would risk oversimplifying the complexity of institutional responses and omitting key dimensions necessary to distinguish between superficial and deeply embedded forms of AI integration.

Each indicator was operationalized as a binary variable (1 = yes; 0 = no) based on explicit evidence from official university websites, including strategic plans, academic catalogs, policy documents, and institutional announcements. A structured coding protocol was developed to enhance consistency, with clear inclusion criteria for each indicator (e.g., formal designation of an AI leadership role, existence of a named AI degree program, or publicly accessible AI policy statements).

Table 1 shows the 20 indicators in the five conceptual domains. Specifically, the 20 binary variables—coded as 1 ("Yes") or 0 ("No")—were identified to capture distinct dimensions of AI institutionalization.

Table 1

Artificial Intelligence Institutionalization Index (AIII): Indicators and Description

Indicators	**Definition**
SECTION A: GOVERNANCE & LEADERSHIP	
Has AI Task Force or Committee	Indicates whether the university has established a formally designated committee or task force to guide AI strategy, policy, or implementation
Has AI Community of Practice (CoP)	Captures the presence of a senior administrative leadership role explicitly responsible for AI oversight, coordination, or strategy.
Has Vice Provost for AI, Chief AI Officer, or Director of AI	Identifies whether the university has a professional/administrative staff position dedicated specifically to AI.
SECTION B: ACADEMIC STRUCTURE & PROGRAMS	

Has AI School or Department	Indicates the existence of a school or department focused primarily on AI and innovation.
Has AI Degree Program (Bachelor's)	Denotes whether the university offers a formally titled undergraduate degree program specifically in artificial intelligence.
Has AI Degree Program (Master's)	Indicates the presence of a formally designated graduate degree program in artificial intelligence.
Offers Certificate/Minor in AI	Captures whether the institution offers a structured AI minor, certificate, or equivalent credential at the undergraduate or graduate level.
Requires Introductory to AI Class (Undergraduate)	Indicates whether an introductory AI course is required for a defined group of undergraduate students (e.g., engineering majors), as explicitly stated on official webpages.
Requires Introductory to AI Class (Graduate)	Captures whether a foundational AI course is required within graduate-level programs.
Has AI Literacy Requirement for All Undergraduates	Identifies whether the university mandates AI literacy, competency, or coursework as a universal requirement for all undergraduate students.
SECTION C: RESEARCH ECOSYSTEM	
Has Interdisciplinary AI Research Institute or Center	Indicates whether the institution has a dedicated research institute or academic center devoted to the research for AI.
SECTION D: POLICY & COMPLIANCE	
Has AI Policy for Faculty	Indicates the existence of formal guidelines or policy statements governing faculty use of AI in teaching, research, or administration.

Has AI Policy for Students	Captures whether official guidance exists regarding student use of AI tools in coursework or academic integrity contexts.
Has AI University-wide Policy	Denotes a comprehensive, institution-wide AI policy applicable across multiple stakeholder groups.
Has AI Upskilling/Reskilling Programs for Staff	Indicates whether the institution offers structured professional development programs aimed at improving AI competencies among staff or faculty.
Has AI Policy on Webpage (e.g., academic integrity, AI usage)	Indicates whether AI-related policy guidance is publicly accessible on official university webpages.
Has AI Accessibility Policy (AI tools must be accessible to disabled students)	Captures whether institutional policy explicitly addresses accessibility requirements for AI tools used in teaching or administration.
SECTION E: CAMPUS LIFE & STUDENT EXPERIENCE	
Has AI-powered Campus Services (chatbots for registration, housing, IT)	Captures the deployment of AI technologies in campus administrative or student service operations.
Has AI Student Group	Indicates the presence of a formally recognized student organization focused on AI.
Has AI Professional Development Opportunities or Events	Denotes whether the university sponsors AI-related workshops, seminars, conferences, or professional development programming.

Appendix B presents a literature review matrix that informed the development of the AIII, linking prior research to each dimension of institutionalization Together, these 20 indicators provide a structured measure of the extent to which AI has been formally embedded within universities' administrative, academic, and public-facing institutional frameworks (Mahrishi et al., 2025).

While the binary coding framework captures the structural presence or absence of AI-related initiatives, the use of institutional websites allows me to further analyze how elite colleges and universities discursively frame AI—as innovation, risk, opportunity, disruption, responsibility, or inevitability. Structural coding captures formal institutional commitments, whereas the text from websites interrogates discursive meaning-making.

Data Analysis

Each university was manually reviewed by examining institutional websites such as central administration webpages, provost and academic affairs offices, computer science and engineering departments, research institute listings, academic program catalogs, academic integrity and policy pages, staff development pages, and student organization listings. The search terms included "artificial intelligence," "AI," "generative AI," "AI policy," "AI institute," "AI degree," and related terms within university domains. To ensure consistency in coding and cross-institutional comparison, only English-language webpages were analyzed, even when universities-maintained websites in multiple languages. Importantly, all 100 universities included in the *Times Higher Education* 2026 World University Rankings sample maintained an official English-language website, allowing for a standardized analysis across institutions and regions. By focusing exclusively on official webpages, I was able to analyze the institutional signaling and formal structures of an institution rather than informal practice or internal experimentation.

To remain objective, I adopted a conservative approach when reviewing the websites. This conservative approach reduced false positives and enhanced construct validity and replicability. A variable was coded as present ("Yes") only if it was explicitly documented on an official university webpage. The absence of explicit documentation resulted in a "No" code. The strict website verification approach was intentionally selected to ensure transparency and replicability, and a reduction in interpretive bias.

Analytical Strategy

The analytical strategy for this study uses quantitative index construction to examine how universities institutionalize artificial intelligence (AI). From the AIII, I coded 1 (present) or 0 (absent) using publicly available information from official university websites.

The index construction formula (unweighted) is as follows:

$$AIII = \frac{\sum_{i=1}^{20} X_i}{20}$$

where the range is 0 to 1. 0 = no AI institutionalization and 1 = full institutionalization. To account for the variation in institutional significance, the indicators were weighted across three tiers: a) deep institutionalization (weight = 3) (e.g., AI literacy requirements, required coursework, leadership roles), b) structural integration (weight = 2) (e.g., degree programs, research centers, university-wide policies), and c) symbolic/supportive elements (weight = 1) (e.g., student groups, events, and public-facing policies). The three-tier weighting scheme (3, 2, 1) was used to reflect theoretically informed differences in the depth and centrality of AI institutionalization across domains, rather than treating all indicators as equally. This approach is grounded in institutional theory, which distinguishes between substantive structural change and more symbolic or loosely coupled practices (Powell & DiMaggio, 2012). The weighted formula is as follows:

$$\text{AIII}=\sum \text{Wi} \sum (\text{Xi} \times \text{Wi})$$

where $X_i = 0$ or 1 and $W_i = weight(1,2, or 3)$. By including a weighted index, I was able to calculate which universities score above 0.80, indicating deep institutionalization.

Table 2 shows the weighted index that was normalized to produce scores ranging from 0 to 1, enabling cross-institutional comparison and ranking in this study.

Table 2

Interpretation of AI Institutionalization (weighted)

Score Range	Category	Description
0.80 – 1.00	Deep Institutionalization Leaders	Full integration
0.60 – 0.79	Comprehensive AI Ecosystems	Broad but not fully embedded
0.40 – 0.59	Research + Policy Hybrids	Dominant global model
0.20 – 0.39	Emerging/Partial Adoption	Limited integration
0.00 – 0.19	Minimal AI Institutionalization	Very low presence

Afterward, the index results were interpreted to analyze how institutional commitments to AI are constructed, communicated, and operationalized. Rather than treating all indicators as equivalent, this approach distinguishes between discursive adoption (e.g., public-facing policies and strategic language) and structural transformation (e.g., curricular requirements and governance authority) (Deem et al., 2008). By integrating quantitative scores with qualitative interpretation, the analysis identifies patterns of convergence and divergence across institutions, highlighting

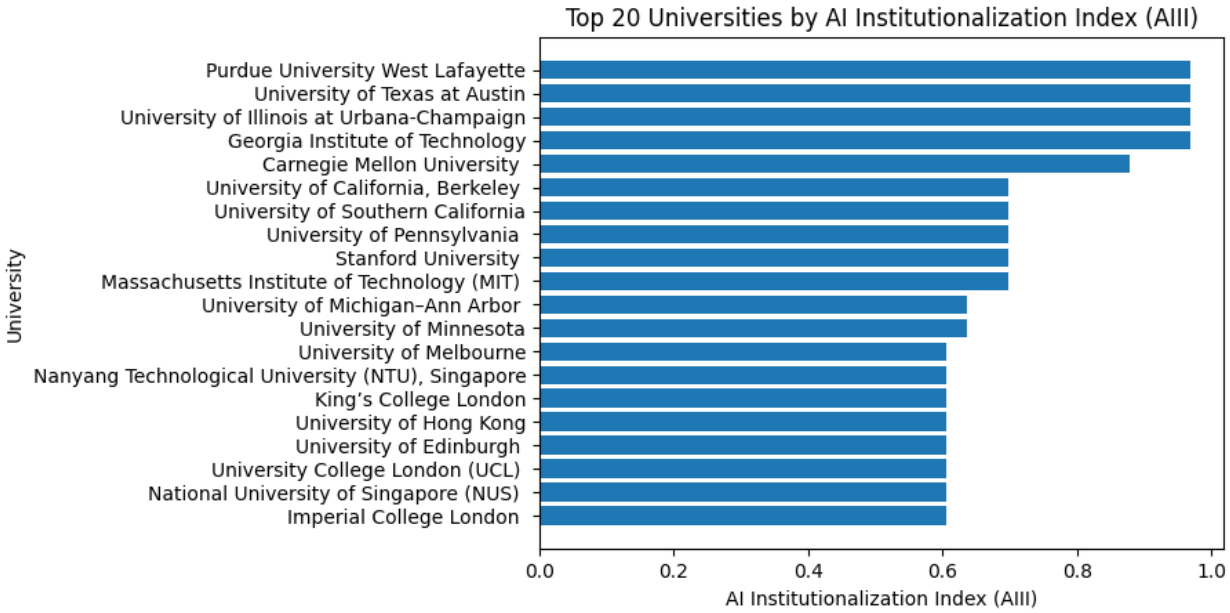
the extent to which universities move beyond symbolic alignment with AI toward deeper institutional embedding. This mixed analytical strategy allows for both a systematic comparison and a theoretically grounded explanation of the variation in AI institutionalization across global higher education.

Results

The analysis reveals substantial variation in the extent to which artificial intelligence (AI) is institutionalized across global research universities (Appendix A). Notably, Figure 1 displays the top 20 universities ranked by the AI Institutionalization Index (AIII). The distribution highlights a small cluster of institutions with near-complete integration of AI across governance, curriculum, and operations, followed by a broader group with moderate levels of institutionalization. The top 14 of the 15 universities are from the North American region.

Figure 1

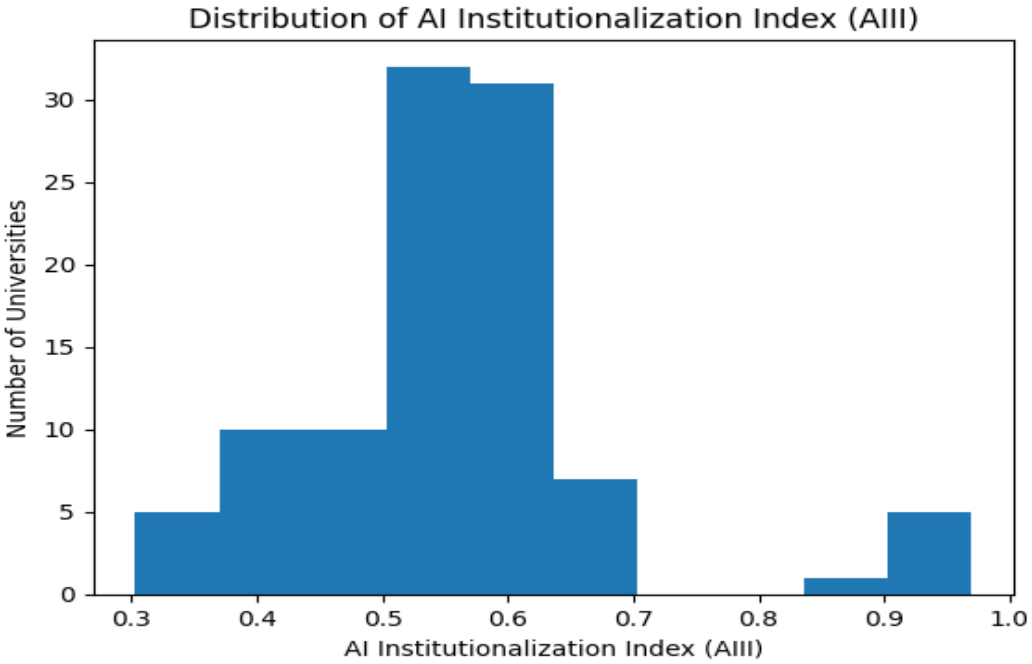
Top 20 Global Research Universities by AI Institutionalization Index (AIII)



When accounting for the top 100 global universities, the distribution reveals a concentration of institutions in the middle range, with a small number of high-scoring outliers representing deeply institutionalized AI systems (Appendix A). The distribution of AI Institutionalization Index (AIII) scores across the sampled universities is shown in Figure 2.

Figure 2

Distribution of AI Institutionalization Index (AIII) across the Top 100 Global Universities



Specifically, most universities cluster approximately 0.45–0.65, with very few exceeding 0.80 and a small elite group siting near 0.95. In addition, AI institutionalization is not normally distributed—rather, it is right skewed, with a small number of highly advanced institutions and a large middle group of partial adopters. This distribution indicates that while AI is widely present across universities—particularly in the form of research centers, academic programs, and public-facing initiatives—it is most often only partially integrated into institutional structures. A smaller subset of institutions achieves markedly higher levels of institutionalization, with AIII scores exceeding 0.80. These "deep institutionalization leaders," primarily large U.S. public universities, demonstrate comprehensive integration across governance, curriculum, and policy domains, including executive-level AI leadership, required coursework, and institution-wide literacy initiatives.

The results of this study support a typology of AI institutionalization that captures distinct modes of adoption across institutions, which is consistent with past research (Hou, 2025). Table 3 presents a typology of AI institutionalization across global universities, revealing six distinct models that vary in depth of curricular integration, governance structures, and research capacity.

While most institutions fall into hybrid or research-oriented categories, only a small subset demonstrates comprehensive, institution-wide integration of AI.

Table 3

Typology of AI Institutionalization at Top Global Research Universities

Typology	Key Characteristics	Variables	Representative Universities	Findings
1. Deep Institutionalization Leaders	Comprehensive integration of AI across curriculum, governance, and leadership	AI leadership roles; required AI coursework (UG + Grad); AI literacy requirement; AI degrees; AI centers; full policy ecosystem	Carnegie Mellon, Georgia Tech, Illinois, Texas Austin, Purdue	Full structural transformation—AI embedded in institutional core
2. Comprehensive AI Ecosystems	Strong presence across research, programs, and policy but no universal curriculum mandates	AI degrees; AI centers; AI policies; certificates/minors; student groups; events	MIT, Stanford, Berkeley, NUS	Broad but not deep integration
3. Research + Policy Hybrids (Dominant Model)	Balanced development of AI research, academic programs, and governance frameworks	AI centers; AI degrees; AI policies; professional development; student groups	Toronto, Michigan, UCL, UCLA, UBC, Groningen, UNSW	Global norm—symbolic + structural adoption
4. Research-Dominant Academic Models	Strong emphasis on AI schools and degrees, limited visible governance/policy discourse	AI schools/departments; AI degrees; research institutes	Tsinghua, Peking, Fudan, Zhejiang, Shanghai Jiao Tong	Structure without policy discourse
5. European Governance–Research Model	Emphasis on research excellence and formal governance frameworks, less curricular centralization	AI centers; AI policies; university-wide frameworks; graduate programs	ETH Zurich, EPFL, TUM, Heidelberg, Humboldt, Bonn	Governance + research, limited curricular change

Typology	Key Characteristics	Variables	Representative Universities	Findings
6. State-Aligned AI Literacy Models	Alignment with national AI strategies; emphasis on AI literacy for students	AI literacy requirement; AI centers; AI degrees; national initiatives	NTU, KAIST	Policy-driven educational transformation

At the highest level are Deep Institutionalization Leaders, which exhibit full integration across curricular, governance, and operational domains. A second group, Comprehensive AI Ecosystems, includes universities with strong research centers, degree programs, and policy frameworks but without universal curricular mandates. The largest category, Research + Policy Hybrids, represents the dominant global model, characterized by the balanced development of AI research, academic programs, and governance structures but limited integration into core undergraduate education. Additional categories include Research-Dominant Academic Models, which emphasize AI schools and degree programs with less visible governance infrastructure (common in some Asian contexts), and the European Governance–Research Model, where institutions demonstrate strong policy frameworks and research capacity but relatively limited curricular transformation. Smaller clusters, such as State-Aligned AI Literacy Models, further highlight the influence of national policy context and disciplinary focus in shaping institutional responses to AI.

Interestingly, the weighting scheme modestly affects the absolute AIII scores of institutions but does not substantially alter the overall typological classifications. Institutions that demonstrate strong, comprehensive integration across governance, curriculum, and policy remain classified as “deep institutionalization leaders” regardless of weighting, as they consistently perform highly across all indicators. However, weighting does sharpen distinctions among mid-range institutions by giving greater emphasis to core structural elements (e.g., leadership roles and required curriculum), which can shift some institutions between adjacent categories (e.g., from “research–policy hybrid” to “comprehensive ecosystem”). In this sense, the weights enhance the sensitivity of the typology rather than fundamentally changing its structure, indicating that the classification is robust to reasonable variations in weighting.

The typology also revealed several striking patterns. For instance, the AIII dataset shows that 100% of the top 100 universities have an AI task force and AI community of practice, but

only 12% have executive AI leadership. Furthermore, master's degree programs in artificial intelligence are universal (100%) across 100 institutions, but undergraduate AI course requirements are rare (5%). In addition, 61% of the institutions currently offer an AI Certificate program, a growing trend across many elite universities. Interestingly, the dataset reveals that 0% have an AI accessibility policy on campuses despite 93% deploying AI services at the institution. However, this may be because these policies are often embedded in general disability services policies rather than standalone AI accessibility documents. Moreover, less than 5% of the students were required to take an introduction-to-AI course at both the undergraduate and graduate levels. However, institutions may have curricular requirements buried in faculty senate records, general education committees, or departmental mandates not captured by institutional websites.

Further correlation analysis confirms that AI institutionalization is highly stratified rather than uniformly distributed. Table 4 indicates that AIII scores are not statistically associated with traditional measures of institutional prestige, including global rankings ($r \approx 0.04$) and institutional scores ($r \approx -0.05$), suggesting that AI institutionalization is not driven by existing prestige hierarchies. Regional comparisons reveal statistically significant differences ($F = 5.86$, $p < .001$), with North American universities exhibiting higher average AIII scores than institutions in Europe and Asia do.

Table 4

Correlation Matrix of AI Institutionalization and University Ranking

Variable	1	2	3
***Times Higher Education* Score**	1.00		
Global Rank	-0.97***	1.00	
AI Institutionalization Index (AIII)	-0.05	0.04	1.00

Note. Pearson correlation coefficients are reported.
*** p < .001, ** p < .01, * p < .05.
THE Score refers to the *Times Higher Education* overall score. Global Rank indicates institutional position (lower values = higher ranks). AIII is a weighted index ranging from 0 to 1.

These findings suggest that institutional engagement with AI reflects strategic and contextual factors rather than hierarchical positioning within global rankings. The absence of statistical

significance confirms that AI institutionalization operates independently of traditional prestige hierarchies.

Table 5 shows that there are significant differences in AI institutionalization across regions.

Table 5

Regional Comparison of AI Institutionalization Index (AIII)

Region	Mean AIII	SD	N
North America	0.63	0.16	37
Oceania	0.58	0.04	6
Canada	0.58	0.04	2
Europe	0.51	0.08	35
Asia	0.50	0.12	20

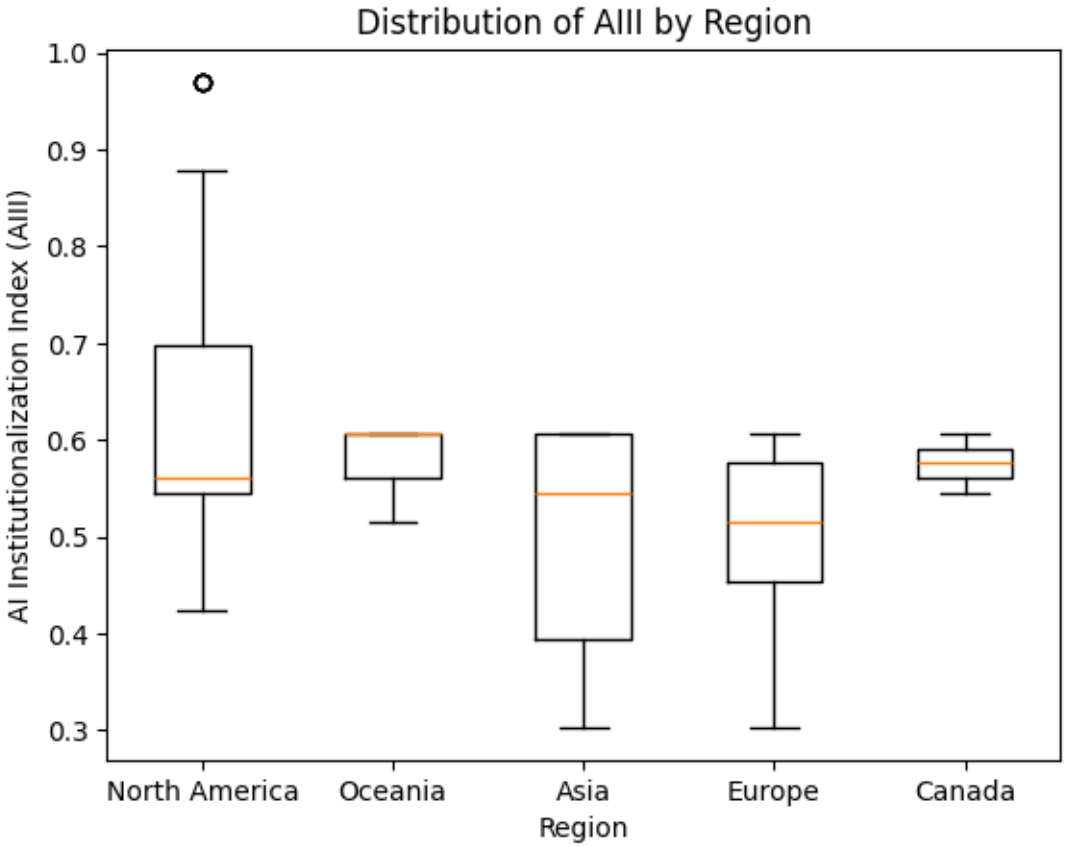
Note. AIII = AI Institutionalization Index, a weighted composite measure ranging from 0 to 1, with higher values indicating greater institutional integration of AI across governance, curriculum, and operations. SD = standard deviation. N = number of universities in each region.

Specifically, ANOVA revealed statistically significant differences in AI institutionalization across regions ($F = 5.86$, $p < .001$). North American universities exhibit the highest average AIII scores, reflecting more comprehensive integration of AI into the governance and curriculum. European institutions demonstrate moderate levels of institutionalization, characterized by strong policy frameworks and research infrastructure but limited curricular mandates. Asian universities display greater variability, with some institutions emphasizing academic program development and others aligning with national AI strategies. These findings suggest that AI institutionalization is shaped by regional policy contexts and institutional priorities rather than uniform global diffusion, which is consistent with past research (Dai et al., 2025).

Boxplot analyses further indicate that these differences are both statistically significant and substantively meaningful, with North America demonstrating higher levels of integration and greater internal variation. The distribution of AI Institutionalization Index (AIII) scores across regions is shown in Figure 3.

Figure 3

Boxplot Distribution of AI Institutionalization Index (AIII) by Regions



North America has the highest median and widest range, indicating both strong overall institutionalization and variation among institutions. Europe and Asia display lower median values, with Asia showing greater dispersion. Oceania and Canada demonstrate relatively consistent but moderate levels of AI institutionalization. These differences highlight the uneven global development of AI institutionalization and reinforce the role of regional policy environments and institutional priorities in shaping adoption patterns.

Taken together, these findings reveal a layered and differentiated pattern of AI institutionalization across global higher education (OECD, 2026). While most universities have adopted AI in visible and symbolic ways, only a small subset has translated these efforts into deep structural transformation. This typology further clarifies that institutional responses to AI are not uniform but instead reflect varying combinations of discourse, governance, and curricular integration (Hou, 2025). These results highlight a persistent gap between the widespread framing of AI as transformative and the more limited extent to which it is embedded in institutional practice.

Discussion

The findings generally support both hypotheses proposed in this study. Consistent with H1, significant regional differences were observed in the level of AI institutionalization across global research universities. North American institutions exhibited the highest average AI Institutionalization Index (AIII) scores and demonstrated more comprehensive integration of AI across governance, curriculum, policy, and institutional support structures than institutions in Europe and Asia. These results suggest that AI institutionalization is shaped by regional policy environments, institutional priorities, and strategic investments rather than occurring uniformly across the global higher education sector.

A small subset of universities emerges as clear "deep institutionalization leaders," achieving AIII scores above 0.80. These institutions—predominantly large U.S. public research universities such as Purdue University, University of Texas at Austin, University of Illinois, Georgia Tech University, and Carnegie Mellon University—demonstrate the comprehensive integration of AI across multiple domains. They are characterized by the presence of executive-level AI leadership, required AI coursework at both the undergraduate and graduate levels, institution-wide AI literacy expectations, and robust governance frameworks. In contrast, even highly ranked global universities often fall into a "comprehensive ecosystem" or "hybrid" category, exhibiting strong AI research centers, degree programs, and public-facing policies but lacking mandatory curricular integration or centralized governance structures. This pattern underscores a key finding: AI institutionalization is highly stratified, with only a small proportion of institutions achieving full structural integration.

The distribution of AIII scores further reinforces this stratification. The right-skewed distribution is shown in Figure 2, with a dense concentration of institutions in the mid-range and a small number of high-scoring outliers. This pattern indicates that AI institutionalization is not evenly dispersed across higher education institutions but instead reflects uneven adoption, where a limited group of institutions has advanced significantly further than the majority. Importantly, correlation analysis demonstrates that AIII scores are not statistically associated with traditional measures of institutional prestige. The correlation between AIII and global ranking is near zero ($r \approx 0.04$), and the relationship with institutional score is similarly negligible ($r \approx -0.05$), suggesting that AI institutionalization operates independently of established prestige hierarchies. In other

words, leading universities in AI institutionalization are not necessarily those at the top of global rankings.

Regional comparisons provide further insight into the uneven global landscape of AI institutionalization. ANOVA indicated statistically significant differences across regions (F = 5.86, $p < .001$). North American universities exhibit the highest average AIII scores (M = 0.63), followed by institutions in Oceania and Canada (M ≈ 0.58), whereas European (M = 0.51) and Asian universities (M = 0.50) demonstrate lower levels of institutionalization. Boxplot visualizations reveal not only differences in central tendency but also variation within regions. North America displays both the highest median and the widest range, indicating the coexistence of highly advanced institutions alongside more moderate adopters. Asia shows the greatest dispersion, suggesting uneven development across national contexts, whereas Europe exhibits more consistent but moderate levels of AI institutionalization. Post hoc comparisons confirm that North American institutions significantly outperform those in several other regions, particularly Europe and Asia.

Consistent with H2, many colleges and universities frequently framed AI as transformative, innovative, and essential to future competitiveness, while evidence of deep structural integration was less common. Although many institutions publicly positioned themselves as leaders in AI adoption, relatively few demonstrated comprehensive implementation through executive leadership roles, institution-wide AI literacy requirements, or mandatory curricular integration. Together, these findings reveal a layered and uneven pattern of AI institutionalization across global higher education. While most universities have adopted AI in the form of research centers, academic programs, and public discourse, only a small subset has translated this commitment into deep curricular and governance transformation (OECD, 2026). The lack of correlation with institutional ranking further suggests that AI adoption is driven less by global prestige competition and more by institutional strategy, policy environments, and organizational priorities.

Limitations

There were several limitations in this study. Notably, this study relies exclusively on publicly available website data, which may undercount some institutions, as some colleges or universities may not update their English websites frequently, especially in the Global South (Mutambara, 2025). Second, this manuscript used only binary coding, yes or no, and as such, this

research does not fully capture the intensity or scale of AI adoption around the world (Li & Wang, 2025). For instance, this study did not control for institutional characteristics, such as endowment size, student enrollment, public vs. private status, or the national regulatory environment, which may have confounded my findings. However, the purpose of this study was not to fully capture all types of institutions but instead to identify key trends, patterns, and themes that occurred from elite research institutions. Third, this study relies solely upon publicly available documents on university websites and thus, this paper cannot fully determine from those documents the extent of "institutionalization". Elite institutions might say they are doing certain things publicly in the strategic plan, but I cannot know the degree of institutionalization from what is available on their websites. Fourth, this research used a new comprehensive data source, the Artificial Intelligence Institutionalization Index (AIII), which has neither been tested nor evaluated by teacher-scholars or practitioners in terms of its validity and reliability. However, the author has published numerous books and articles on the impact of AI on global higher education to ensure data accuracy (Lin et al., 2024). Fifth, the sample only included colleges and universities from the top 100, where some institutions are considered specialist sites of study (e.g., life sciences/medicine). As a result, the sample may not truly reflect the levels of AI integration within the AIII. Finally, this article performs only a comparative descriptive analysis of the top 100 elite research universities and does not include non-research, non-elite institutions (e.g., teaching-focused institutions or regional comprehensive universities). However, given that institutional legitimacy and signaling increasingly occurs at all types of colleges and universities (DiMaggio & Powell, 1983), the use of website documentation is appropriate for this qualitative study to analyze formal institutional positioning through digital public interfaces.

Implications of the Study

Several implications emerge from this study. First, the uneven distribution of AI institutionalization observed in this study suggests that universities are engaging with AI in varied and context-dependent ways, rather than progressing along a singular or linear trajectory of “readiness” (Übellacker, 2025). Importantly, this study does not assume that an AI-driven society is an inevitable outcome; rather, it acknowledges that the prominence of AI is shaped by policy agendas, industry influence, and institutional narratives that position AI as a strategic priority (Hojeij, 2025). Within this context, differences across institutions reflect divergent interpretations of their roles - ranging from emphasizing research and innovation to adopting

more cautious or critical approaches to curricular and governance integration. Rather than framing these differences as deficits, the findings highlight how universities make selective and situated decisions about whether and how to engage with AI. These variations nonetheless raise important questions about access to AI-related knowledge and skills, particularly as some institutions expand curricular offerings and institutional supports while others do not (Papadimitriou et al., 2025).

Second, the lack of correlation between AI institutionalization and global university rankings challenges prevailing assumptions about innovation leadership in higher education. Rather than being driven by prestige hierarchies, AI adoption appears to reflect institutional strategy, national policy contexts, and organizational priorities. These findings suggest that universities have agency in shaping their AI trajectories, regardless of their position in global rankings. Moreover, the results highlight a critical disconnect between discursive commitments and structural implementation, where many institutions publicly position themselves as AI leaders without enacting deep curricular or governance reforms. From a critical perspective, this raises questions about whether AI is being used as a form of symbolic signaling rather than substantive transformation. Moving forward, institutions will need to align rhetoric with practice by investing in sustainable, equitable, and accountable models of AI integration that prioritize not only innovation but also ethical responsibility and institutional coherence.

Recommendations

On the basis of these findings, this study offers several recommendations for higher education institutions, policymakers, and sector leaders seeking to advance comprehensive AI integration. First, universities should move beyond symbolic or research-focused adoption toward systemic curricular integration, particularly at the undergraduate level. This includes developing a required introductory AI coursework and institution-wide AI literacy initiatives that ensure that all students—regardless of discipline—are equipped with foundational knowledge and critical understanding of AI. Second, institutions should strengthen their governance and leadership structures by establishing dedicated roles (e.g., Chief AI Officer or Vice Provost for AI) and coordinating intention cross-campus efforts through formal task forces or strategic frameworks. Such structures can help align fragmented initiatives, build institutional capacity, and support coherent, institution-wide implementation (Brady, 2026).

Third, universities should prioritize the development of comprehensive and transparent AI policies, including guidelines for faculty and students, ethical use frameworks, and clearly articulated institutional positions on AI (Elon University, 2025). Specifically, more standardized guidelines across institutions are needed to ensure a consistent approach to AI governance (Papadimitriou et al., 2025). Importantly, these policies should explicitly address issues of equity and accessibility, an area notably absent across most institutions in this study. Fourth, institutions should invest in faculty and staff development, including upskilling and reskilling programs that enable educators and administrators to effectively integrate AI into teaching, research, and administrative processes (Chen & Haniya, 2025). Today, most faculty members use AI for information search, followed by research activities (Alam et al., 2026). Finally, policymakers and higher education systems should support these efforts through funding, national strategies, and collaborative networks that encourage knowledge sharing and reduce disparities across institutions. Collectively, these recommendations aim to bridge the gap between discourse and practice, fostering more equitable, coordinated, and deeply embedded approaches to AI institutionalization in higher education**.**

Future Research

Future research should build on this study by extending both the scope and depth of analysis of AI institutionalization in higher education (Zhou & Al-Samarraie, 2025). First, longitudinal studies are needed to examine how institutional commitments to AI evolve over time, particularly as universities move from symbolic adoption toward deeper curricular and governance integration (Aguado-García et al., 2025). Second, future work could refine and validate the AI Institutionalization Index (AIII) by incorporating additional dimensions such as funding levels, faculty engagement, student outcomes, and industry partnerships (Robert, 2026). Furthermore, future research should examine regional comprehensive universities and teaching-focused institutions, which are often under resourced when AI is integrated into the classroom. Third, qualitative approaches - including interviews with institutional leaders, faculty, and students - provide deeper insight into how AI initiatives are implemented and experienced beyond what is publicly communicated on university websites (Bista, 2026). Finally, comparative studies across national policy contexts could further illuminate how government strategies, regulatory environments, and labor market demands shape institutional responses to

AI, thereby advancing a more nuanced understanding of global variation in higher education transformation (Xu & Thien, 2026).

Conclusion

This study demonstrates that while AI has become a prominent feature of institutional discourse and strategic positioning in global higher education, its deeper integration into core academic and governance structures remains uneven and stratified. Using the AI Institutionalization Index (AIII), the analysis reveals that only a small subset of universities—primarily in North America—have achieved comprehensive integration across curriculum, leadership, and policy, while the majority operate at a more partial level characterized by strong research activity but limited curricular and structural transformation. Moreover, the absence of a significant relationship between AI institutionalization and global rankings highlights that adoption is shaped more by institutional strategy and regional context than by traditional prestige hierarchies. Taken together, these findings highlight a critical gap between the widespread framing of AI as transformative and the relatively limited extent to which it is embedded in institutional practice, raising important questions about the future direction, equity, and accountability of AI in higher education.

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Appendix A

Top 100 *Times Higher Education (THE)* 2026 Global Research Universities by AIII rank.

THE Rank	THE Score	Name	Country	Region	AIII Score	Rank AIII
85	68.8	Purdue University West Lafayette	United States	North America	0.969697	1
50	75.8	University of Texas at Austin	United States	North America	0.969697	2
41	77.1	University of Illinois at Urbana-Champaign	United States	North America	0.969697	3
41	77.1	Georgia Institute of Technology	United States	North America	0.969697	4
24	85	Carnegie Mellon University	United States	North America	0.878788	5
9	94.4	University of California, Berkeley	United States	North America	0.69697	6
73	71.1	University of Southern California (USC)	United States	North America	0.69697	7
14	90.8	University of Pennsylvania	United States	North America	0.69697	8
5	97.1	Stanford University	United States	North America	0.69697	9
2	97.7	Massachusetts Institute of Technology (MIT)	United States	North America	0.69697	10
23	86.9	University of Michigan–Ann Arbor	United States	North America	0.636364	11
88	67.5	University of Minnesota	United States	North America	0.636364	12
37	79	University of Melbourne	Australia	Oceania	0.606061	13
31	81.6	Nanyang Technological University (NTU), Singapore	Singapore	Asia	0.606061	14
38	78.7	King’s College London	United Kingdom	Europe	0.606061	15
33	80.5	University of Hong Kong (HKU)	Hong Kong	Asia	0.606061	16
29	82.5	University of Edinburgh	United Kingdom	Europe	0.606061	17
22	87.5	University College London (UCL)	United Kingdom	Europe	0.606061	18
17	89.7	National University of Singapore (NUS)	Singapore	Asia	0.606061	19
8	94.7	Imperial College London	United Kingdom	Europe	0.606061	20

53	75	University of Wisconsin-Madison	United States	North America	0.606061	21
58	74.1	Monash University	Australia	Oceania	0.606061	22
41	77.1	McGill University	Canada	Canada	0.606061	23
41	77.1	The Chinese University of Hong Kong	Hong Kong	Asia	0.606061	24
58	74.1	The Hong Kong University of Science and Technology	Hong Kong	Asia	0.606061	25
72	71.2	University of California, Santa Barbara (UCSB)	United States	North America	0.606061	26
67	72	Washington University in St Louis	United States	North America	0.606061	27
70	72.8	University of California, Davis (UCD)	United States	North America	0.606061	28
82	71.3	Korea Advanced Institute of Science and Technology (KAIST)	South Korea	Asia	0.606061	29
80	69.7	The Hong Kong Polytechnic University	Hong Kong	Asia	0.606061	30
92	66.7	Vanderbilt University	United States	North America	0.606061	31
53	75	The University of Sydney	Australia	Oceania	0.606061	32
73	71.1	City University of Hong Kong	Hong Kong	Asia	0.606061	33
79	70	UNSW Sydney	Australia	Oceania	0.606061	34
27	83.4	Technical University of Munich	Germany	Europe	0.575758	35
35	79.6	École Polytechnique Fédérale de Lausanne	Switzerland	North America	0.575758	36
98	66.3	KTH Royal Institute of Technology	Sweden	Europe	0.575758	37
51	75.7	University of Science and Technology of China	China	Asia	0.575758	38
56	74.9	University of Manchester	United Kingdom	Europe	0.575758	39
62	73.7	University of Amsterdam	Netherlands	Europe	0.575758	40
92	66.7	RWTH Aachen University	Germany	Europe	0.575758	41
5	97.1	Harvard University	United States	North America	0.575758	42
98	66.3	University of Tübingen	Germany	Europe	0.575758	43
86	68.5	Yonsei University (Seoul campus)	South Korea	Asia	0.545455	44

90	67.1	University of Copenhagen	Denmark	Europe	0.545455	45
95	66.6	Lund University	Sweden	Europe	0.545455	46
84	68.9	University of Glasgow	United Kingdom	Europe	0.545455	47
98	66.3	University of Birmingham	United Kingdom	Europe	0.545455	48
28	82.9	Duke University	United States	North America	0.545455	49
18	89.5	Cornell University	United States	North America	0.545455	50
30	81.9	Northwestern University	United States	North America	0.545455	51
47	76.6	University of California, San Diego (UCSD)	United States	North America	0.545455	52
16	90.1	Johns Hopkins University	United States	North America	0.545455	53
18	89.5	University of California, Los Angeles (UCLA)	United States	North America	0.545455	54
31	81.6	New York University (NYU)	United States	North America	0.545455	55
21	88.5	University of Toronto	Canada	North America	0.545455	56
25	83.7	University of Washington	United States	North America	0.545455	57
87	68.3	Sungkyunkwan University (SKKU)	South Korea	Asia	0.545455	58
95	66.6	University of Vienna	Austria	Europe	0.545455	59
76	70.4	Boston University	United States	North America	0.545455	60
80	69.7	The University of Queensland	Australia	Oceania	0.545455	61
97	66.4	University of California, Irvine (UCI)	United States	North America	0.545455	62
41	77	University of British Columbia (UBC)	Canada	Canada	0.545455	63
82	69.3	University of Groningen	Netherlands	Europe	0.545455	64
46	76.8	KU Leuven	Belgium	Europe	0.545455	65
65	72.6	Brown University	United States	North America	0.545455	66
52	75.4	London School of Economics and Political Science	United Kinom	Europe	0.515152	67
49	76.3	Universität Heidelberg	Germany	Europe	0.515152	68
92	66.7	University of Bonn	Germany	Europe	0.515152	69

89	67.2	Humboldt University of Berlin	Germany	Europe	0.515152	70
73	71.1	Australian National University	Australia	Oceania	0.515152	71
57	74.3	Delft University of Technology	Netherlands	Europe	0.515152	72
61	74	Kyoto University	Japan	Asia	0.515152	73
34	76.5	LMU Munich	Germany	Europe	0.515152	74
48	77.7	Paris Sciences et Lettres – PSL Research University Paris	France	Europe	0.515152	75
20	89.4	Columbia University	United States	North America	0.484848	76
10	94.1	Yale University	United States	North America	0.484848	77
1	98.2	University of Oxford	United Kingdom	Europe	0.454545	78
3	97.2	Princeton University	United States	North America	0.454545	79
78	70.3	University of North Carolina at Chapel Hill	United States	North America	0.454545	80
66	72.2	Wageningen University & Research	Netherlands	Europe	0.454545	81
53	75	Karolinska Institute	Sweden	Europe	0.454545	82
15	90.6	The University of Chicago	United States	North America	0.454545	83
3	97.2	University of Cambridge	United Kingdom	Europe	0.454545	84
91	66.9	Charité - Universitätsmedizin Berlin	Germany	Europe	0.454545	85
7	96.3	California Institute of Technology (Caltech)	United States	North America	0.424242	86
70	71.3	Leiden University	Netherlands	Europe	0.424242	87
80	69.7	University of Bristol	United Kingdom	Europe	0.424242	88
11	93.1	ETH Zurich (Swiss Federal Institute of Technology)	Switzerland	Europe	0.424242	89
36	79.3	Fudan University	China	Asia	0.393939	90
13	92.3	Peking University	China	Asia	0.393939	91
26	83.5	The University of Tokyo	Japan	Asia	0.393939	92
68	71.6	Université Paris-Saclay	France	Europe	0.393939	93
39	78.3	Zhejiang University	China	Asia	0.393939	94
40	76.6	Shanghai Jiao Tong University (SJTU)	China	Asia	0.393939	95

12	93	Tsinghua University	China	Asia	0.363636	96
62	73.7	Nanjing University	China	Asia	0.363636	97
58	74.1	Seoul National University	South Korea	Asia	0.30303	98
68	71.6	Institut Polytechnique de Paris	France	Europe	0.30303	99
76	70.4	Sorbonne University	France	Europe	0.30303	100

Note: THE Rank and THE Score (overall) is from the Times Higher Education (2026) World University Rankings.

Appendix B

Literature review matrix aligned with AIII indicators.

AIII Indicator	Author(s)	Key Concept/Theme	Evidence/Contribution
AI Task Force Committee	Attard-Frost & Lyons (2025); Şen et al. (2026)	AI governance systems	Formal governance structures guide institutional AI strategy
AI Community of Practice (CoP)	Attard-Frost & Lyons (2025); Şen et al. (2026)	AI governance systems	Formal governance structures guide institutional AI strategy
Vice Provost/Chief AI Officer	Hojeij (2025); Laufer et al. (2025)	Strategic leadership	Leadership roles critical for institutionalization
AI School/Department	Morgan State University News (2026); Idaho State University News (2026)	Organizational structures	AI departments signal structural commitment
Bachelor's AI Degree	Abbasi et al. (2025); NYT (2025)	Curriculum expansion	AI majors reflect institutional prioritization
Master's AI Degree	NTU (2025); Abbasi et al. (2025)	Graduate education	Advanced programs signal deeper integration
AI Certificate/Minor	Abbasi et al. (2025); Hou (2025)	Flexible curriculum	Broadens AI access
Intro AI (Undergrad)	Annapureddy et al. (2024); Elon (2025)	AI literacy	Undergrad AI literacy emphasized
Intro AI (Graduate)	Chen & Haniya (2025)	Advanced pedagogy	Graduate-level integration
AI Literacy Requirement	Annapureddy et al. (2024); OECD (2026)	Core competency	AI literacy as institutional goal

AI Research Center	Dai et al. (2026); Xu & Thien (2026)	Research ecosystems	Interdisciplinary collaboration
Faculty AI Policy	Papadimitriou et al. (2025); Jin et al. (2025)	Governance	Guides faculty AI use
Student AI Policy	Francis et al. (2025); Dai et al. (2025)	Academic integrity	Student policy frameworks
University-wide AI Policy	OECD (2026); Mahrishi et al. (2025); Parker et al. (2026)	Institutional frameworks	Comprehensive policy commitment
AI Staff Upskilling	Qian & Bowman (2026); Lin et al. (2024)	Workforce development	Staff training initiatives
AI Policy on Website	Jin et al. (2025); Papadimitriou et al. (2025); Parker et al., (2025)	Transparency	Public AI policy signals
AI Accessibility Policy	Reimers et al. (2026); Mutambara (2025)	Equity	Accessibility considerations
AI Campus Services	Labadze et al. (2023); Aguado-García et al. (2025)	Operational integration	AI in services
AI Student Group	Lin et al. (2024); Pireci Sejdiu (2025)	Student engagement	Grassroots AI engagement
AI Professional Development	Alqahtani & Wafula (2025); Jensen et al. (2025)	Institutional learning	Events/workshops

Note: Each AIII indicator was informed by prior literature on AI integration, governance, curriculum, and policy in higher education.