AIEOU 2026
Shared Research Agenda

Dr Sara Ratner, Ms Dongxia Nie, Professor Elizabeth Wonnacott,
Professor Rebecca Williams and Professor Anne Trefethen
in collaboration with our global AIEOU Community

AIEOU Shared Research Agenda

Dr Sara Ratner, Ms Dongxia Nie, Professor Rebecca Williams,
Professor Elizabeth Wonnacott and Professor Anne Trefethen

Suggested citation:

Ratner, S., Nie, D., Williams, R., Wonnacott, E., & Trefethen, A. (2026). AIEOU 2026 Shared Research Agenda. Department of Education, University of Oxford, UK. https://doi.org/10.5287/ora-nogo0ra4e

Table of Contents

Acknowledgements

Sincere thanks to the following people from our AIEOU community who helped shape our 2026 shared research agenda through their contributions to this work. Please note, not all of our valuable contributors elected to share their name.

Aaron Wijeratne
Aarti Sharma
Abdelhamid Ahmed
Abdul Malik
Abdullah Al Fraidan
Adam Browning
Adam Zivanic
Adeel Khalid
Adiba Kasimova
Adit Gupta
Adriana Alba
Ahmad Hassan Afridi
Aigerim Shilibekova
Aisha D'Souza
Akhilanand Chaurasia
Alejandra Clerici Arias
Alex More
Alexia Antzaka
Ali Batuhan Yildiz
Aline da Silva Neto
Alireza Chamanzar
Alison Galia Gonzalez
Alyson Wright
Amandeep kaur
Amandeep Sehmi
Amy Moore
Anait Akopyan
Anand Marya
Andreea Panoiu
Andy Lucchesi
Andy Nobes
Anila DeHart
Anitha Bai T
Anne Trefethen
Annette Carmel Rome
Anthony Abaidoo
Antoine Casanova-Mazet
Antonis Mouhtaropoulos
Anusha Hewage
Arsalan Qutbi
Artem Artyukhov
Aruj Khaliq
Arvinder Kaur
Arwa Taibani
Asad Qayyum
Atakan Ozkaya
Aurelio Amaral
Aviva Legatt
Awan AL-Zangana
Aygun Mustafayeva
Ayse Demir
Ayse Ozturk
Aysegul Liman Kaban
Azimov D Turdiboevich
Barbara Loranc
Baris Atiker
Beatrice Segura Harvey
Bernardo Firpo
Berrin Kalsin
Bert Verhoeven
Beth Stark
Betül Guzelkaya
Beyza Yilmaz
Bharat Singh Deora
Bianca Farthing
Bikem Ozdinc Tanriverdi
Birgit Phillips
Bo Kyung Kim
Brett Koenig
Brigid Freeman
Çağatay Çınar
Cansel Mehmet Özermen
Carla Aerts
Carmen J. Cividanes-Lago
Caroline Williams
Casandra Silva Sibilin
Catalina Rata
Celia Antoniou
Chaeyeon Lim
Chanathip Paka
Chiara Storace
Chris Bush
Chris Hack
Chrissie Gallagher-Mundy
Christa Schmid-Meier
Christian Coene
Christian Quintino
Christina Wang
Christine Stoltz
Christopher Bradford
Chun Wang (Reinhard) Chau
Cigdem Nilufer Umar
Cintia Pla-García
Clara Hawking
Clare Shaw
Colin Fu
Constanza González Vidal
Coupin Magdalena
Cristina Prego de Oliver-Lopez
Daevesh Kumar Singh
Daire Maria Ni Uanachain
Dan Bowen
Daniel Hogg
Daniel Serig
Daniela Hau
Dara Tafazoli
Darina Slattery
Daswin De Silva
David Curran
David Nally
David Palfreyman
David Schmocker
Deepika Kohli
Denise Turley
Dev Dutta
Devika Toprani
Dilara Saygin
Dilmurod Azimov
Dilnoza Dehkanova
Dilşah Kalay

Doaa Hamam
Dodzi Amemado
Dongxia Nie
Doreen Mayrell
Dorina Girbovan
Duaa Baig
Ece Yavuzarslan
Edgar Gomero
Eileen McCaughey
Eleanor Overland
Elif Polat Hopcan
Elizabeth Wonnacott
Emiliano Pereiro
Emine Demir Okumuş
Emine Demiroz
Eram Aziz
Erman Uzun
Ertan Toy
Esma Gültüvin Gür Omay
Esma Sıla Tekinsoy
Estella Oncins
Estelle Ciesla
Eve Gaumond
Evija Mirke
Ewelina Lacey
Eylul Alici
Ezgi Aydemir Altaş
Faizan Abbasi
Fanqi Zeng
Farrukh Hafeez
Fatemeh R Madiseh
Fathima Roshan Rakeeb
Faye Palmer
Feiya Long
Firdevs Gündoğan Önderöz
Francis Jones
Francisca Beroíza-Valenzuela
Funda Çam
Funda Koca
Gareth Brinkworth
Gary Liang
Gemma Keating
Georgia Aspinox
Georgia Neilson
Gerald Crisci
Ghadah Almutairy
Ghulam Shabbir
Giancarlo Brotto
Gokce Kurt
Gökhan Hınız
Govand Khalid Azeez
Gowri Shankar Sivabala
Grace Ugwonna
Grazzia M. M. Chirinos
Gülçin Coşgun
Gumrah Sahin
Güner Güler Dalkıran
Gyanendra Rawat
Haeng A Kim
Hamza Ghodhbane
Hanife Taşdemir
Harry Dimitriadis
Harvey Trump
Hasna Syakh
Hasnain Zafar Baloch
Hayal Köksal
Helen Crompton
Henry Taylor
Herman vander Merwe
Hesham Anwar Ghanem
Heydy Robles
Hilal Karaoğlan
Holly Wedd
Huiwen Wang
Idan Shavit
Ifigeneia Drami
Ilker Ulubey
Ines Springael
Ingrid Sfet
Ioannis Anapliotis
İrem Özturk
Iris Serrat Roozen
Irving Martinez
İshak Kirac
Işıl Boy Ergül
Jack Downs
Jacqueline Ashby
Jaime Bissa
James Edgell
James Fish
James Wood
Jamie Laycock
Jamie Sherson
Jasper Roe
Javid Mahdavi
Jay Dorris
Jen Deakin
Jennifer DeLarm
Jennifer Seon
Jeremy Nguyen
Jess Carroll
Jessi Chartier
Jinu K Varghese
Joanna Marriott
Jodi Casabianca
Joe Jackson-Taylor
John Deans
Jolanda Morkel
Jon Santangelo
Jonathan Kelly
Joshua Underwood
Judith Marcelo Motta
Julie Foss
Julie-Maree Stowe
Junlong Li
Jyoti Arora
K.V.J. Murombedzi
Kadir Yücel Kaya
Karishma Udawat
Kashif Raza
Kasia Truszkowska
Kateryna Suprun
Katherine Mora
Kelly Ilich
Kelly Webb-Davies
Kemal Faruk Bakır
Kexin Yu
Kinga Petrovai
Kingsley Ugwuanyi
Kiran Shahnawaz
Kumaran Rajaram
Kunaal Dhingra
Lamia Y. Malshowail
Lamprini Papargyri
Lana Hiasat
Lan-Fang Liu
Laura Ferroglio
Lauren Vallely
Lavish Dudeja
Lidia A. Martinez
Lieselot Declercq
Lilia Dabija
Lindsey Powers
Lisa McLaughlin

Lisa Wakefield
Lizzie Watts
Lloyd Ffrench
Lodovica Puxeddu
Lokesh Goenka
Lorenzo Natali
Lori Robbins
Lorna Waddngton
Louie Giray
Lu Shijia
Lucas Kohnke
Lucianne Zammit
Lucy Read
Luisa Baum
Luke Graham
Lydia Foong Yoke Yean
Mahipal Jadeja
Malachy Scullion
Manish Malik
Manish Pokharel
Manuel B. Garcia
Marco Mongiello
Margareth David Legaspi
Maria Zirenko
Maria-Antònia Guardiola
Marian Licheri
Marie Rodet
Mariella Rivelli
Marina Gardiner Legge
Mark A. Bassett
Martina Amontagna
Maryam Akbarilakeh
Marzieh Parvaneh AK
Matthew Esterman
Matthew Nyaaba
Maud Stiernet
Md Shahin Kabir
Md Ulfat Tahsin
Med Kharbach
Meena Bhandari
Meena Kapahi
Meena Kapahi
Meenkashi Dwivedi
Meesha Arora
Meg Fortington
Meghan Killeen
Mehtap Arat
Mehwish Raza
Mel Sellick
Meline Grigoryan
Melisa Gülfem Başer
Meltem Ipek Oner
Meri Nasilyan
Merve Bako
Metin Altun
Michelle Fischthal
Miguel Fortes Sánchez
Mike Perkins
Mina Mahdikhani
Miriam Tanti
Mirko Susta
Mohamed Abdelmageed
Mohammad Lohrasbi
Mohammad M. Wazzan
Mohammed Alayoob
Mona Altundemir
Monolina Sarkar
Mostafa Zabet
Mubarak AbdulSalam
Muhammad A Kamran
Muhammad Anwar Khan
Muhammad Zahid
Muhammed Sezer Kizilates
Mujgan Atabey
Mukesh Sharma
Murat Sümer
Mustafa Hastürk
Mustafa Tugyan
Naaz Farooqi
Nancy Kwangwa
Nandita Kshetrimayum
Natalia Kucirkova
Nataliya Kharchenko
Natasha Banks
Natasha Fenwick
Naureen Shehzad
Nermeen Louizi Ghoniem
Nermin Karademir
Neslihan Bilikozen
Nga Nguyen
Nguyen Thi Xuan Mai
Niaz Chowdhury
Nicole Ginnane
Nicole M Alexander
Nilgün Özdamar
Nishant Sharma
Nitesh Kumar
Niti Mittal
Noor Aisha
Noosha Mehdian
Norazha Paiman
Nur AKKUŞ ÇAKIR
Nurkhamimi Zainuddin
Nurun Nahar
Obed Boateng
Olga Paparseni
Oliver James Russell
Olivia Inwood
Onur Demirkaya
Orlando Simon
Ozel Hurmuzlu
Özlem Esen
Ozlem Zengin
Paola Martinez Romero
Patrick van Abbema
Paul Edelblut
Paul Mabrey
Paula Pitombo Rego
Peck Ping Lee
Pedro Flexa Ribeiro
Peter Bannister
Peter Marshman
Piriya Somasundram
Prabhat Kumar Chaudhari
Prachya Prerna
Priyadarshini Krishnan
Prue Laidlaw
Rabeya Binte Habib
Rachel Feyisayo Oluwatuyi
Rachel Toncelli
Rahul Pachori
Raona Williams
Rashee Singh
Rawia Ahmed
Rebecca Williams
Rebekah Lord
Reyhaneh Sohrabi
Rikke Duus
Rishi Raj Balwaria
Rita Bateson
Robert Farrow
Robert Sanchez Tsui
Rukhsana Zia
Ruth Aigbe

Ruth Karachi Benson Oji
Sadiqa Mohammed Ali
Safia Tmiri
Salih Mansur
Salim Razı
Saloni Sinha
Salvatore Varriale
Samaa Haniya
Samantha M. Curle
Samia Kouki
Sanjib Malo
Sara Aouni
Sara Ratner
Sarah Alcock
Selcuk Kilinc
Selçuk Yusuf Arslan
Selin Erzin
Sercan Çelik
Sercan Volkan Şahin
Serpil Meri Yilan
Seval Kemal
Shafiza Mohamed
Shahida Rehman
Shakhnoza Mustanova
Shan Ali
Shannon H. Doak
Shaofeng (Andy) Wang
Shawana Fazal
Shawna-Kaye Tucker
Shiv Contractor
Shiva Sivasubramaniam
Sibel Erduran
Silver Okonkwo
Simon Balderson
Simon Bond
Simone Hirsch
Simone Ries
Siobhan Morgan
Solomon Mintah Afari
Sonika Pal
Sook Jhee Yoon
Sophie Tan
Srabonty das Gupta
Stacy Moore
Sudha Jaganathan
Sue Trory
Sukaina Walji
Swati Rajwal
Syed Muhammad Raza
Tanushri Purohit
Tanzeela Anbreen
Tatjana Titareva
Tausif Zafar
Tebogo Mojafi
Theodora Tziampazi
Thi Thuy Nga Nguyen
Thilinika Wijesinghe
Thomas B. Frøsig
Tiffany Petricini
Tina Austin
Tobias Morat
Tom Revell
Tommy Scillian
Tong Yi
Tuyet Ngo Thuy Anh
Twinkle Srivastava
Ülkü Ülker
Uzoma Elizabeth Egwu Okoro
Vanessa Mar-Molinero
Victor Perez
Victoria Hedlund
Vinay Kumar
Vishal Rana
Vishal Sharma
Wafaa Elsawah
Wasseem El Sarraj
Watsachol Narongsaksakul
Xin Zhao (Skye)
Yama Farooq Mujadidi
Yasemin BOY
Yelkin Diker Coşkun
Yining (Evelyn) Tang
Yohani S Ranasinghe
Yonah Welker
Yusef Atteyih
Yusuf Ben-Tarifite
Zaheed Mahmood
Zain Ali
Zakir Hossain
Zarrina Salieva
Zeynep Kumkale
Zeynep Öztürk-Duman
Zhuohan Chen
Zoe Handley
Zohaib Khurshid
Züleyha Tulay

Introduction

AI in Education at Oxford University (AIEOU) is a global, interdisciplinary research hub based in the Department of Education at the University of Oxford. It is dedicated to advancing thoughtful, evidence-informed, and human-centred approaches to exploring artificial intelligence (AI) in education. Established to respond to the rapid expansion of AI technologies across educational systems, AIEOU brings together researchers, educators, policymakers, technologists, and civil society actors who share a commitment to understanding not only what AI could do, but what it should do in service of learning, equity, and human flourishing.

At its core, AIEOU recognises that AI in education is not simply a technical challenge. It is a social, ethical, pedagogical, and governance challenge that unfolds differently across contexts, cultures, and educational traditions. Questions of data, assessment, automation, creativity, agency, and accountability intersect with longstanding concerns about power, inclusion, trust, and professional judgement. AIEOU therefore takes an explicitly interdisciplinary and participatory approach, creating spaces where diverse forms of expertise can inform research agendas, challenge assumptions, and shape priorities collaboratively.

This shared research agenda, co-created with our community, reflects AIEOU's commitment to collaboration over prescription. Rather than setting a fixed roadmap, it articulates a living set of questions, tensions, and priorities emerging from dialogue across regions and sectors. It is intended to support coordinated inquiry, inform policy and practice, and foster a global community of researchers and partners working towards responsible, context-sensitive, and socially grounded uses of AI in education. As such, the agenda is both a point of convergence and an open invitation to contribute, critique, and co-create future directions.

Our Approach

AI in education has been an established research field since the late twentieth century, with roots in earlier work on intelligent tutoring and computer-assisted instruction (Alkhatlan and Kalita 2018; Selwyn 2019). Yet with the launch of generative AI technologies in late 2022, sweeping claims have followed regarding the potential for AI to transform education along with massive investments into AI technologies and high profile policy statements (Holmes and Tuomi, 2022).

There is no doubt that for many, AI has "changed the way we go about our daily lives" (Carvalho et al., 2022, p.1). It has long been a "routine presence in everyday life" (Williams and Eynon, 2020, p.223). But the great expectations increasingly expressed regarding the potential impact of AI on education and learning are frequently misaligned with its technical possibilities (Holmes and Tuomi, 2022). So too, these claims are frequently not supported by evidence of the impact of AI on teaching and learning.

Universities and educational institutions around the world are grappling with the broader implications of AI (Bjork, 2023) and it is increasingly shaping the future of higher education (Dignum, 2021; Pavlik, 2023). As such, there is a need for educators and learners to deeply reflect on the role of AI and the design structures that will shape future learning activity (Carvalho et al., 2022). As educators, parents and members of society, we must ponder what every child should know about AI. How can we best support learning in an increasingly AI-enabled context? These questions, and many more, are critical questions that must be answered yet the speed and depth with which AI is being embedded makes them hard to answer in a timely, evidence-informed way (Touretzky et al., 2019; Carvalho et al., 2022).

Williamson and Eynon (2020) advocate for developing a broader academic community who could both use and critique the development of AI as an important aspect for future work. That is, in part what we aim to do here. AIEOU is neither for nor against AI in education. We are a dynamic, engaged community of practice working together to better understand its potential and its peril concurrently. By bringing together stakeholders from educational institutions, governments, technology companies, consultants, advisors, students, parents and researchers we are facilitating a shared conversation to co-create a vision of the future world we all want to live in (Gonçalves, 2016).

By engaging in collective social dreaming (Dunne & Raby, 2013; Long & Manley, 2019) we aim to build the collective capacity of our community (and in turn their communities) to think through probable, plausible, possible, and preferable futures that people want, and to build a foundation for action that could lead to these futures (Carvalho et al., 2022).

AIEOU was created as a space for social dreaming, discussion and debate (Dunne and Raby, 2013). Our participatory approach aims to enable the development of insight and change in practice simultaneously.

Methodology

This shared research agenda was developed through a staged, participatory methodology designed to surface, refine, and prioritise research questions that reflect the realities of AI in education across contexts and sectors.

Launched at the inaugural AIEOU convening in September 2025, a diverse group of researchers, educators, policymakers, technologists, and civil society representatives were invited to engage with a core framing question: *What are the most important research questions for AI in education today?* This initial phase was intended to open up the problem space, enabling participants to articulate concerns, aspirations, and uncertainties grounded in their own professional and regional experiences.

A survey of the wider community of approximately 2,000 members (as of November 2025) invited respondents to submit research questions in their own words. In total, 552 responses were received, representing a broad cross-section of perspectives that varied by disciplinary background and region.

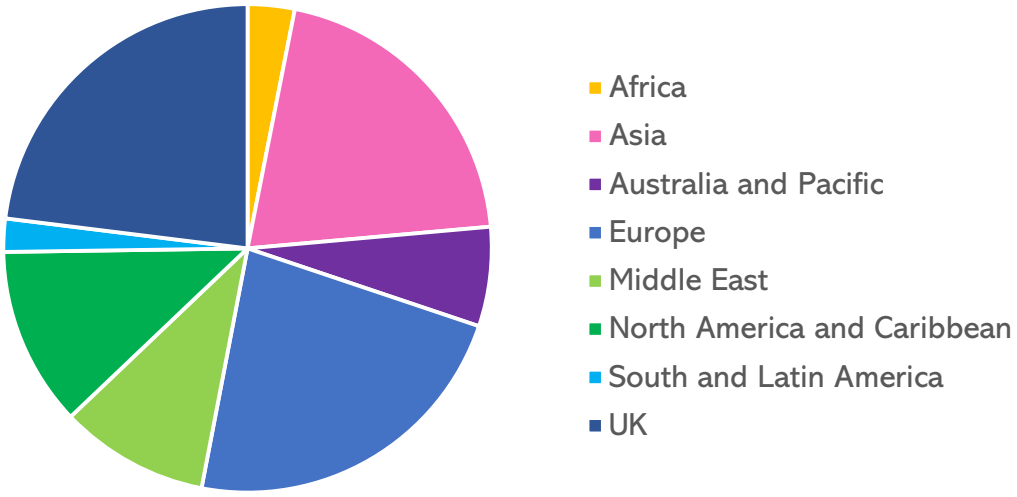
Iterative analysis proceeded in stages. First, qualitative responses were cleaned and de-duplicated, with closely related or overlapping questions clustered to preserve substantive meaning while reducing redundancy. An inductive thematic analysis was then conducted to identify recurring concepts, tensions, and areas of convergence across the dataset. Throughout this process, care was taken to attend to minority perspectives and context-specific concerns, ensuring that less frequently raised issues were not automatically marginalised. The emergent themes were subsequently reviewed and refined through collaborative sense-making within the AIEOU research team, drawing on interdisciplinary expertise to test coherence, challenge assumptions, and clarify boundaries between themes. The resulting set of priorities was not treated as a definitive or exhaustive list, but as a structured representation of shared concerns (at this moment in time) and open questions that warrant sustained collective inquiry.

Importantly, this methodology treats the research agenda as a living artefact rather than a fixed endpoint. The agenda is intended to be revisited, extended, and recalibrated through future AIEOU activities and ongoing community engagement. In this way, the approach combines methodological rigour with openness, recognising that responsible research on AI in education must remain responsive to technological change, educational practice, and societal values.

Exploring by Region

Responses to the AIEOU community survey reflected broad regional participation, with contributions spanning the United Kingdom, Europe, Asia, Africa, the Middle East, North America and the Caribbean, South and Latin America, and Australia and the Pacific.

Figure 1. Regional Representation in the Survey

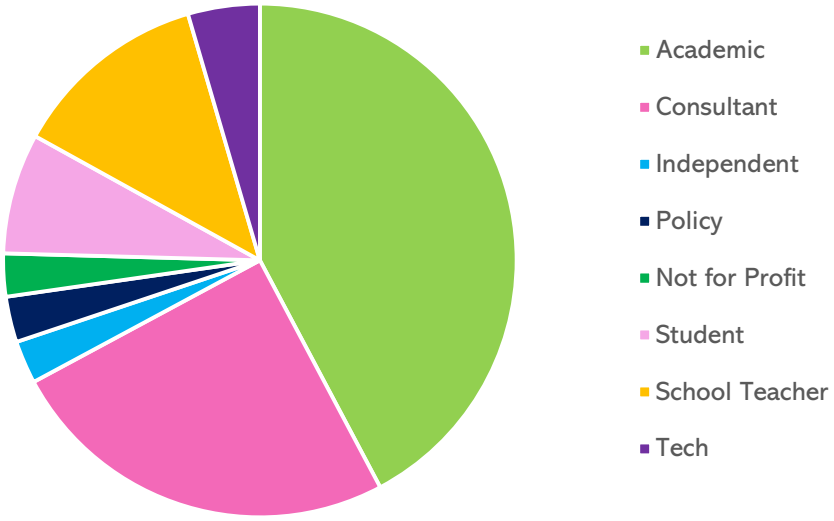


While respondents based in the UK and Europe were most strongly represented, the distribution also indicates substantial engagement from across Asia and other global regions, underscoring the international reach of the AIEOU network. This pattern reflects the organic growth and momentum of AIEOU since its launch, with participation emerging through professional networks and peer referral in a manner akin to snowball sampling rather than through a planned or stratified approach to representation. As a result, the dataset should be understood as indicative rather than representative, capturing a rich range of situated perspectives while also highlighting the need for continued outreach and regionally grounded partnership-building to ensure that future iterations of the agenda more fully reflect voices from currently underrepresented contexts.

Exploring by Role

The survey responses reflected a diverse range of professional roles across the AI in education ecosystem.

Figure 2. Role Representation in the Survey



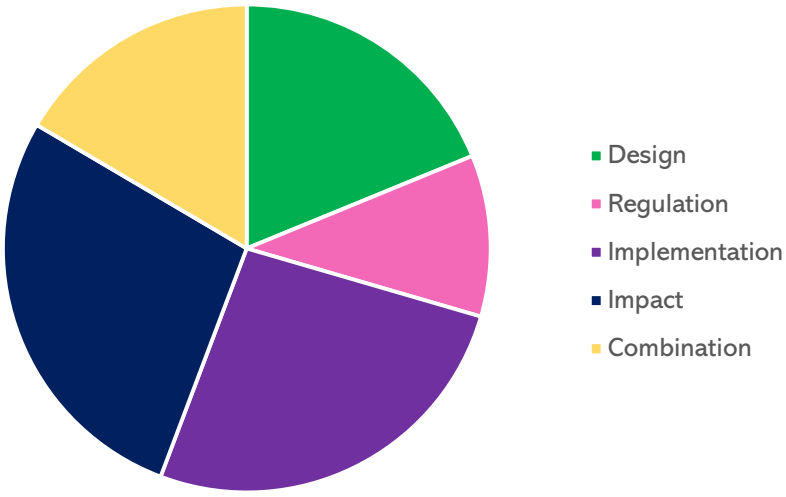
Participants identifying as academics formed the largest group, followed by consultants and schoolteachers, alongside representation from policy, technology, not-for-profit organisations, independent professionals, and students. This distribution aligns with AIEOU's origins within academic research networks while also signalling meaningful engagement from practice- and policy-facing communities.

As with regional participation, the balance of roles reflects the organic growth of the AIEOU community through existing professional networks rather than a purposive sampling strategy. Consequently, the dataset captures a rich mix of research-led, practice-informed, and system-level perspectives, while also indicating opportunities to further strengthen participation from underrepresented roles in future phases.

Research Themes

Established as guiding pillars for AIEOU at its inception, the four research themes: Design, Regulation, Implementation and Impact provide a conceptual framework for the hub's activities.

Figure 3. Mapping Responses to the AIEOU Research Themes



As research questions were submitted through the survey, they were mapped to these themes through an organic, inductive process rather than through forced categorisation. Notably, the distribution of questions demonstrated strong alignment with the original thematic structure, suggesting a shared understanding across the community of the key problem spaces shaping AI in education.

Questions related to impact and implementation were most prominent, reflecting widespread concern with how AI systems are experienced in practice and how their effects can be understood and evaluated. At the same time, sustained attention to design and regulation underscores recognition that responsible AI in education depends on early-stage value-sensitive design and robust governance, alongside downstream assessment of outcomes. The presence of questions spanning multiple themes further reinforces the interconnected nature of these challenges and the value of an integrated, interdisciplinary research agenda.

Emerging Research Domains

These emerging research domains were developed through an inductive thematic analysis of open-ended responses from 552 survey participants. Responses were first reviewed in full to gain an overview of the conceptual landscape then open coding identified key concepts using participants' own language rather than a predefined framework. Codes were iteratively compared and grouped into higher-order themes, which were consolidated into ten research domains capturing recurring patterns across educational sectors, geographic contexts, and stakeholder groups.

Table 1. Emerging research domains

Emerging domains	Illustrative keywords and phrases from responses
Human-centred education and human flourishing	Human-centred; human flourishing; wellbeing; mental health; relationships; dignity; curiosity; grit; purpose of education; purpose of schools; human–AI collaboration; Ubuntu; student-teacher relationships; teacher identity
Teaching, learning, and pedagogy	Teaching and learning; pedagogy; best practice; schools; early childhood; developmentally appropriate; teacher role; teacher workload; school leadership; classroom use; learning design; professional practice
Cognition, metacognition, and learning sciences	Cognition; learning sciences; metacognition; reasoning; thinking skills; cognitive offloading; productive struggle; friction; epistemology; engagement; impact on the brain; neurophysiological data
Equity, inclusion, and global justice	Equity; inclusion; access; poverty; global south; below poverty line; out-of-school children; gender; multilingual; culture; diversity; disability; barriers to learning; bias; inequality
Ethics, safety, and integrity	Ethics; safety; integrity; cheating; authorship; trust; accountability; sustainability; responsible use; governance; assurance of learning; institutional frameworks
Agency, autonomy, and participation	Agency; autonomy; motivation; self-efficacy; learner voice; teacher agency; participation; co-design; empowerment; student experience; decision-making
Assessment, feedback, and academic integrity	Assessment; feedback; bias in assessment; multilingual assessment; academic integrity; cheating; authorship; assurance of learning; evaluation; science education assessment
AI/Digital literacy and professional capacity	AI literacy; AI literacy for teachers; AI literacy for students; professional development; curriculum co-design; critical literacy; digital literacy; understanding AI systems; leadership
Future of education, work, and institutions	Future of education; future of teaching; future of universities; workforce; future of schooling; purpose of education; institutional change; life-long learning
Governance, policy, and systems design	Policy; governance; regulation; infrastructure; global frameworks; mediation and arbitration; system readiness; institutional capacity; governance keeping pace

Setting the Research Agenda

Table 2. Research domains derived from open-text responses.

Research Domains	Scope and focus
1. Human-centred education and human flourishing	Concerns education continues to serve human development rather than technological optimisation or automation. Includes wellbeing, mental health, relationships, dignity, curiosity, identity, purpose, and human–AI collaboration.
2. Teaching, learning, and pedagogy	How AI shapes classroom practice and educational design, including pedagogy, instructional quality, engagement, teacher workload, best practice in schools, early childhood pedagogy, school leadership, and professional teaching roles.
3. Cognition, metacognition, learning sciences	Cognitive processes underpinning learning, including reasoning, thinking skills, metacognition, cognitive offloading, productive struggle, epistemology, and impacts of AI on attention, effort, and understanding.
4. Equity, inclusion, and global justice	Issues of access, fairness, and representation across contexts, including poverty, disability, gender, multilingualism, cultural diversity, bias, global south perspectives.
5. Ethics, safety, and integrity	Normative and moral concerns including ethical use, safety (especially for children), academic integrity, authorship, cheating, trust, sustainability, accountability, and responsible governance.
6. Agency, autonomy, and participation	The extent to which AI supports or undermines learner and teacher agency, autonomy, motivation, self-efficacy, voice, co-design, and meaningful participation in educational processes.
7. Assessment, feedback, and academic integrity	How learning is evidenced and evaluated in AI-mediated contexts, including assessment design, feedback, bias in assessment, multilingual assessment, assurance of learning, and institutional assessment frameworks.
8. AI literacy and professional capacity	Capacity-building for understanding and using AI, including AI literacy for teachers, students, and leaders, professional development, curriculum co-design, critical literacy, and understanding AI systems.
9. Future of education, work, and institutions	Forward-looking concerns about the future of schooling, higher education, universities, teaching professions, workforce implications, and the evolving purpose of educational institutions.
10. Governance, policy, and systems design	System-level considerations including policy, regulation, infrastructure, institutional readiness, global frameworks, mediation, arbitration, and governance keeping pace with technological change.

Agenda Setting Exercise

This agenda setting exercise should not be read as a set of prescriptive research priorities or a claim about what AI in education will or should become. Drawing on the perspectives of 552 participants, it simply establishes a starting point for identifying the kinds of evidence that are needed to examine, test, and substantiate the conversations that currently surround AI in education.

The research domains that emerge reflect the shared concerns, hopes, and uncertainties of this community about how AI may shape teaching, learning, equity, agency, and human flourishing. In this sense, they can be read as expressions of *social dreaming*: collective intuitions about what matters, what is at stake, and what should be protected or cultivated as educational systems change (Dunne and Raby, 2013). The role of research, as framed here, is not to resolve these questions in advance, but to create the conditions for careful inquiry into them.

Seen in this way, the AIEOU Shared Research Agenda offers a set of orienting questions that invite research that is attentive to lived educational practice, sensitive to context and difference, and open to multiple futures. It foregrounds the need to generate empirical, conceptual, and participatory evidence that can inform more grounded discussions about AI in education over time. Our shared agenda aims to support a research programme that remains reflective, inclusive, and responsive as both technologies and educational priorities continue to evolve.

Research Questions by Density

Highest density areas
Human-centred education and human flourishing – 139 submissions
Cognition, metacognition, and learning sciences – 91 submissions
Governance, policy, and systems design – 85 submissions

Mid-density areas
Equity, inclusion, and global justice – 73 submissions
Teaching, learning, and pedagogy – 70 submissions
Agency, autonomy, and participation – 70 submissions

Lower but still substantial density
Ethics, safety, and integrity – 58 submissions
Assessment, feedback, and academic integrity – 55 submissions

Emerging or more specialised focus areas
Future of education, work, and institutions – 36 submissions
AI literacy and professional capacity – 33 submissions

Note: These densities are based on structured classification of the responses. The totals do not sum to 552 because many submissions were mapped to more than one principle.

Interpretation

First, human-centred education and human flourishing clearly dominate the landscape. This prominence suggests that the AIEOU community is not distracted by technical optimisation, performance metrics, or tool comparison. Instead, contributors consistently foreground normative and philosophical questions about the purposes of education in an AI-mediated world. Submissions in this category interrogate dignity, identity, creativity, relational trust, and the social and moral development of learners. Many contributors ask not simply how AI can improve efficiency, but whether and how it reshapes the very ends of education. There is a discernible concern that technological acceleration may outpace ethical reflection, and that educational systems must remain anchored in human judgement and relational depth. The centrality of this principle indicates that the moral and developmental stakes of AI are widely perceived as foundational rather than peripheral. In this sense, AIEOU's agenda is structurally humanistic: technological innovation is treated as a means to serve human flourishing, not as an end in itself.

Second, the strong density in cognition, metacognition, and learning sciences reveals a deep concern with how AI reshapes thinking itself. Contributors are not only asking what AI does institutionally, but what it does cognitively and developmentally. Questions cluster around attention, memory, reasoning, epistemic curiosity, metacognitive awareness, and intellectual resilience. There is sustained interest in whether AI scaffolds deeper understanding or inadvertently shortcuts productive struggle. Several submissions probe the long-term developmental implications of sustained AI interaction, particularly for younger learners whose cognitive architectures are still forming. This emphasis suggests that the community recognises that AI is not merely an external tool layered onto existing systems, but an intervention into the processes of knowing and learning. The prominence of this principle positions AIEOU firmly within interdisciplinary dialogue with the learning sciences, developmental psychology, and cognitive research, rather than restricting inquiry to policy or technological implementation.

Third, the prominence of governance, policy, and systems design reflects a recognition that AI in education is no longer hypothetical or experimental at the margins. Contributors appear acutely aware that AI systems are already embedded in procurement decisions, classroom practices, assessment infrastructures, and institutional strategies. As a result, questions shift from speculative exploration to structural accountability. Submissions interrogate regulatory frameworks, public–private partnerships, procurement standards, data governance, and institutional oversight. There is an emerging consensus that responsible AI in education cannot rely solely on individual teacher discretion or informal norms. Instead, it requires coordinated systems-level thinking and policy alignment across local, national, and international contexts. The density in this category signals that the community perceives governance not as a secondary consideration, but as an urgent and practical necessity in the current phase of AI adoption.

The mid-density cluster around equity, inclusion, and global justice, teaching, learning, and pedagogy, and agency, autonomy, and participation further enriches the picture. Contributors demonstrate sustained attention to classroom practice, distributive justice, and human participation, yet these themes are often articulated through broader human-centred or governance-oriented framings. For example, equity concerns frequently emerge within discussions of global power asymmetries in AI development, linguistic representation, or procurement standards. Pedagogical questions are often embedded within reflections on teacher expertise and professional judgement. Similarly, agency is frequently discussed in relation to autonomy within AI-mediated systems rather than as an isolated construct. This distribution suggests that while classroom practice and justice implications are central, they are being conceptualised within wider systemic and normative frameworks. The community appears to be resisting siloed analysis in favour of integrative thinking that connects pedagogy, equity, agency, and governance.

Taken together, the density patterns indicate a research community that is both reflective and forward-looking. Rather than focusing narrowly on tool adoption or technical capability, contributors are engaging with foundational questions about purpose, cognition, institutional responsibility, and justice. The Shared Research Agenda therefore emerges not as a reactive response to technological novelty, but as a structured inquiry into how AI should be situated within enduring educational values and systems.

Although AI literacy and the future of education, work, and institutions attracted comparatively fewer direct submissions, this distribution may in fact reflect a distinctive feature of the AIEOU community. Rather than treating AI literacy as a standalone technical competency, or institutional transformation as an abstract policy horizon, contributors appear to situate these concerns within deeper questions of human purpose, cognition, pedagogy, justice, and governance. In many cases, literacy and workforce implications are embedded within broader reflections on agency, assessment, professional judgement, and systemic responsibility. The relative density of other principles therefore suggests that the community is not overlooking literacy or institutional change but reframing them within a more foundational inquiry into what education is for, how learning occurs, and how technological systems should be governed. This orientation positions AIEOU's Shared Research Agenda as structurally grounded and normatively anchored, rather than driven by short-term technological trends.

Sample Research Questions by Research Domain

The following sample questions illustrate the breadth and depth of inquiry emerging within each research domain. They are drawn from the 552 submissions and have been lightly synthesised for clarity while preserving the intent of contributors. The list is not exhaustive, nor does it represent a definitive taxonomy. Rather, it offers a representative cross-section of the concerns, tensions, and aspirations shared by the AIEOU community.

1. Human-centred education and human flourishing

What does a human-centred approach to AI in education require in practice?
What are the social and emotional implications of long-term AI integration in classrooms?
What does meaningful human oversight look like in AI-supported environments?
How can we prevent technological determinism from reshaping educational values?
In what ways might AI reshape the purposes of education itself?
What forms of human creativity are amplified or diminished by AI use?
How should wellbeing be conceptualised in AI-enabled educational settings?
How does AI mediate peer relationships and collaborative learning?
What are the developmental implications of early exposure to generative AI?
How can educational institutions safeguard human dignity in automated systems?

2. Teaching, learning, and pedagogy

What new pedagogical models are emerging in AI-augmented classrooms?
How should curriculum design respond to generative AI capabilities?
What is the evolving role of the teacher in AI-enabled environments?
How can AI be integrated without weakening subject-specific rigour?
How does AI reshape feedback cycles between teachers and learners?
How can pedagogical theory guide responsible AI implementation?
What forms of professional judgement become more important in AI-mediated teaching?
What are the risks of pedagogical deskilling?
How should higher education teaching adapt to widespread AI use?
How can AI tools align with constructivist, sociocultural, or cognitive pedagogies?

3. Cognition, metacognition, and learning sciences

How does AI use affect attention, memory consolidation, and knowledge retention?
Under what conditions does AI scaffold higher-order thinking?
Does reliance on AI tools weaken problem-solving persistence?
How can AI systems be designed to promote self-regulated learning?
What impact does AI have on critical thinking development?
How can AI support epistemic curiosity rather than passive consumption?
What are the cognitive trade-offs of AI-assisted writing?
How does AI affect transfer of learning across domains?
What are the implications of AI tutoring systems on learning?
How does AI use differ developmentally across age groups?

4. Equity, inclusion, and global justice

Who benefits most from AI in education, and who is excluded?
What barriers to access persist in low-resource contexts?
How does AI reproduce or challenge existing structural inequities?
How can linguistic diversity be embedded in AI systems?
What responsibilities do developers have toward underrepresented populations?
How can AI support learners with disabilities or additional needs?
How should AI systems adapt to culturally diverse contexts?
How can procurement processes prioritise equity?
Does AI widen digital divides within countries?
What forms of data justice are required in educational AI?

5. Ethics, safety, and integrity

How can student data privacy be meaningfully protected and what constitutes informed consent in AI-mediated learning?
What safeguards are required for child protection in AI systems?
How transparent should AI decision-making be?
How can algorithmic bias be identified and mitigated?
How should institutions respond to AI-enabled academic misconduct?
How should risk be evaluated in experimental AI deployment?
What accountability mechanisms are necessary for developers?
What are the implications of surveillance-based educational technologies?
How can explainability be operationalised for educators?
How should unintended harms be addressed and remedied?

6. Agency, autonomy, and participation

Does AI enhance or diminish learner autonomy?
How can teacher agency be preserved amid automation pressures?
How does AI influence students' confidence in their own thinking?
What forms of critical AI literacy support autonomy?
How can AI tools be designed to invite reflection rather than compliance?
How should institutional policies protect human discretion?
What governance structures support participatory engagement?
How can learners be meaningfully involved in evaluation of AI tools?
What power dynamics are embedded in AI-mediated classrooms?
How can autonomy be fostered in younger learners interacting with AI?

7. Assessment, feedback, and academic integrity

How should assessment design evolve in response to generative AI?
What forms of assessment remain robust in AI-rich environments?
Can AI-generated feedback be pedagogically sound and context-sensitive?
How can formative assessment leverage AI without reducing teacher insight?
How should academic integrity policies be redefined?
What is the future of high-stakes examinations?
How can AI support peer assessment processes?
Should AI use be integrated transparently into assessment criteria?
What new competencies should assessment prioritise?
How do perceptions of fairness shift with AI involvement?

8. AI literacy and professional capacity

How can teacher education programmes integrate AI critically?
How can school leaders build institutional AI capacity?
What competencies do policymakers require?
What distinguishes critical AI literacy from technical proficiency?
How can interdisciplinary collaboration support capacity-building?
How can misconceptions about AI be addressed?
How should universities embed AI literacy across disciplines?
What role should industry partnerships play in professional learning?
How can capacity-building avoid exacerbating inequities?
What metrics assess meaningful AI literacy?

9. Future of education, work, and institutions

How will AI reshape the relationship between education and employment?
What skills and dispositions will be most valued in AI-augmented economies?
How should universities adapt structurally to technological change?
Will credentialing systems remain fit for purpose?
How might AI disrupt traditional academic disciplines?
How might AI change institutional governance structures?
What new forms of collaboration between education and industry are emerging?
How should curricula anticipate labour market transformation?
Will AI accelerate or reduce precarity in educational professions?
What futures should education actively resist?

10. Governance, policy, and systems design

What regulatory frameworks are needed for AI in education?
How should national policies address rapid technological change?
What standards should guide procurement decisions?
What global coordination mechanisms are required and what role should international organisations play?
How should public and private actors share responsibility?
How can evidence inform policy responsibly?
What safeguards prevent commercial overreach in schools?
How should risk be monitored longitudinally?
How can local contexts shape global governance models?
What systemic redesign is required for sustainable integration?

These questions reveal a field in active formation. They demonstrate thematic breadth and a shared commitment to interrogating AI in education at cognitive, ethical, pedagogical, and systemic levels. The domains are interrelated and mutually informing, reflecting the complexity of the challenges ahead. This structured synthesis provides a scaffold for deeper collaboration. It signals that the community is ready to move beyond diagnosis towards coordinated, evidence-informed research.

Collab Labs

The research domains identified in this agenda will form the organising architecture for the AIEOU Collab Labs in 2026. Each Lab will be anchored in one domain and convene interdisciplinary teams drawn from the AIEOU community, partner institutions, policy makers, and practitioner networks. Labs will move beyond question-framing to develop feasible research designs, pilot methodologies, and shared outputs such as co-authored papers, pilot studies, open datasets, and policy briefings. Lead convenors will work with co-leads to ensure geographic and sectoral diversity, and to combine theoretical rigour with practical implementation expertise.

Over the course of 2026 the Labs will follow a three phase rhythm: an initial scoping and co-design period to refine research questions and methods, a middle phase focused on pilot work, rapid evidence generation, and capability building, and a concluding phase dedicated to synthesis, dissemination, and mobilisation of findings for policy and practice. By structuring convenings in this way, the Collab Labs are intended to produce both academic insight and actionable recommendations that can be taken up by schools, universities, and policy makers.

Implications

The Shared Research Agenda has implications for three distinct audiences.

For researchers, it offers a coordinated programme of inquiry that encourages interdisciplinary methods, longitudinal studies, and mixed-methods approaches. It suggests priority investments in developmental and learning-science research, ethics-informed design studies, and governance evaluations that link micro-level classroom effects with macro-level institutional dynamics.

For policy makers, the agenda emphasises the need for evidence that is timely, context-sensitive, and policy-relevant. It calls for procurement standards, data governance frameworks, and regulatory experiments that are informed by empirical findings rather than ideology.

For educational institutions and practitioners, the agenda highlights the importance of building professional capacity, embedding critical AI literacy across curricula, and piloting assessment models that reflect higher-order competencies.

These implications point to a co-ordinated response: funders should prioritise interdisciplinary grants and implementation studies; universities should align teacher education and CPD with critical AI literacies; and policy makers should create mechanisms for iterative, evidence-led regulation.

Limitations

This agenda is the product of a broad, participatory exercise, but it is not a representative census of global opinion. The survey drew on an engaged community and grew organically through professional networks, which introduces self-selection and English-language biases. Academics are relatively well represented in the sample, and some regions and practitioner groups remain under-represented. The findings therefore capture momentum and priority within the AIEOU network rather than providing definitive, generalisable measures of global need. Equally, the speed of technological change means that any agenda of this kind is provisional; new capabilities, use cases, or harms may emerge rapidly and merit immediate attention. The Collab Labs are thus as much an epistemic response to these limits as they are a research mechanism: they are designed to update and extend the agenda through iterative, participatory inquiry.

Conclusion: A Living Agenda

The publication of this Shared Research Agenda marks a beginning. It captures a moment of collective concern and curiosity about how AI might shape teaching, learning, justice, and institutional practice. By organising these concerns into research domains and by translating them into the Collab Labs, AIEOU aims to catalyse sustained, rigorous, and socially grounded research that is responsive to context and accountable to communities.

We invite researchers, practitioners, policy makers, and civil society partners to join the Labs, to test assumptions, and to co-produce evidence that will shape policy and practice in the years ahead. The work that follows will be iterative, contested, and generative; through that process we hope to steward AI in education toward outcomes that support learning, equity, and human flourishing.

References

Carvalho, L., Martinez-Maldonado, R., Tsai, Y.-S., Markauskaite, L. and De Laat, M. (2022). How can we design for learning in an AI world? *Computers and Education: Artificial Intelligence*, *3*, p. 100053, https://doi.org/10.1016/j.caeai.2022.100053.

Dignum, V. (2021). The role and challenges of education for responsible AI. London Review of Education, 19(1). https://doi.org/10.14324/lre.19.1.01

Dunne, A., & Raby, F. (2013). Speculative everything: Design, fiction, and social dreaming. Cambridge: The MIT Press. http://www.jstor.org/stable/j.ctt9qf7j7

Gonçalves, D. R. (2016). Social dreaming: From inquiry to insight. Masters thesis. Parsons, School of Design – The New School. https://static1.squarespace.com/static/56787cbd40667a75f6c6feaf/t/573a8b0b356fb08a016abca7/1463454477021/Ricardo+Dutra_Social+Dreaming+%28online+quality%29.pdf

Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European journal of education*, *57*(4), 542-570.

Long, S., & Manley, J. (Eds.). (2019). Social dreaming: Philosophy, research, theory and practice. Routledge. https://doi.org/10.4324/9780429449277

Selwyn, N. (2019). What's the Problem with Learning Analytics? *Journal of Learning Analytics*, *6*(3): 11–19.

Touretzky, D., Gardner-McCune, C., Martin, F., & Seehorn, D. (2019, July). Envisioning AI for K-12: What should every child know about AI?. In *Proceedings of the AAAI conference on artificial intelligence* (Vol. 33, No. 01, pp. 9795-9799).

Tuomi, I., Cachia, R. and Villar-Onrubia, D. (2023), On the futures of technology in education: emerging trends and policy implications. Publications Office of the European Union, Luxembourg. https://data.europa.eu/doi/10.2760/079734

Williamson, B., & Eynon, R. (2020). Historical threads, missing links, and future directions in AI in education. Learning, Media and Technology, 45(3), 223–235. https://doi.org/10.1080/17439884.2020.1798995