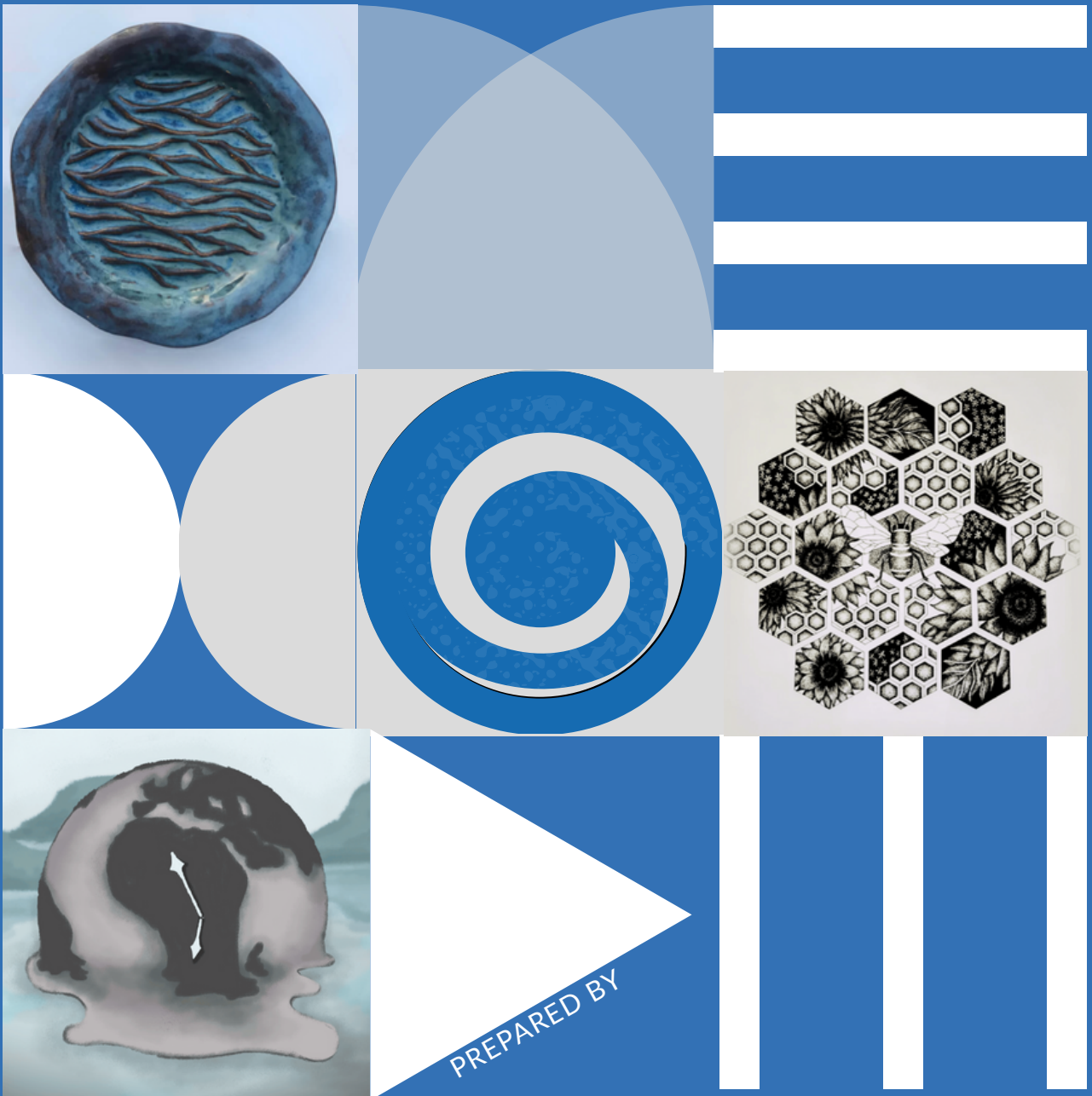


REWORLDDING PLANETARY GOVERNANCE

YOUTH CONTRIBUTIONS TO THE IMPLEMENTATION OF
THE UN DECLARATION ON FUTURE GENERATIONS





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Cover art from the "Turn It Around!" initiative, featuring youth visions of education futures, including artwork by Loree Chung, USA (top left), Aura Izumi, Indonesia (bottom left), and Bushra Najam, Pakistan (middle right). For more information, see www.turnitaroundcards.org

LIVING SUMMARY

This report synthesizes the contributions of students from Arizona State University (ASU) and the Université Paris Cité / Learning Planet Institute (LPI) as well as young members of Je m'engage pour l'Afrique (JMA) who participated in the UNESCO Futures Literacy Lab on Learning for Planetary Citizenship and Anticipatory Governance, held in Paris on March 14, 2025. Designed in collaboration with the UNESCO Futures Literacy and Foresight team and the UNESCO-MOST BRIDGES Coalition, the Lab invited young people to critically examine anticipatory assumptions about the future, imagine alternatives, and propose new models of governance.

Youth participants brought with them a wide range of lived experiences, disciplinary perspectives, and cultural backgrounds – as artists, students, researchers, engineers, poets, and activists from around the world. Some carried personal histories of displacement or ecological loss. Others brought ancestral knowledge or community-based practices often excluded from institutional policymaking. What united them was a commitment to imagination and a responsibility to future generations.

Participants engaged in a structured futures methodology, including exercises such as systems mapping (STEEP+V), scenario reframing, persona development and Causal Layered Analysis.

These methods were intended to clarify not only the limitations of inherited institutions but also generative creative capacities fit for the purposes of responsible futures and anticipatory governance.

From this process emerged a set of visionary yet grounded proposition that challenge inherited norms and advocate for intergenerational, more-than-human and relational models of decision-making. At their core, these proposals identify a number of radical shifts necessary for enacting models of governance capable of safeguarding planetary futures:

- **Expand Representation:** widening the circle of political stakeholders to include ecosystems, species, caregivers, and future generations.
- **Shift Time Horizons:** treating time itself as an ethical boundary, holding today's decisions accountable to lifecycles, migrations, and generations that must be anticipated.
- **Redefine Knowledge:** expanding systems of technical expertise by elevating care, lived experience, local, traditional and Indigenous wisdom, and more-than-human sensing as valued and appropriate ways of knowing.

^[1] Social, Technological, Economic, Environmental, Political and Values

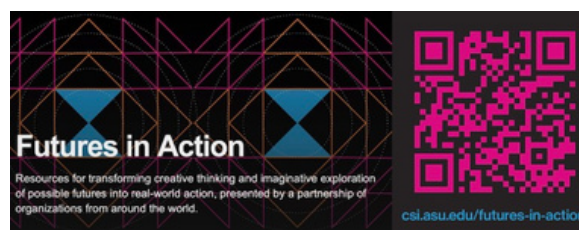
^[2] Sohail Inayatullah.

Acknowledgement of these shifts yielded alternative principles of planetary governance:

- **Ecological sentinel systems** that treat rivers and forests as political voices.
- **Guardians** who speak for non-human life.
- **Future generations assemblies** at which future rights holders are represented, ensuring intergenerational accountability.
- **Backcasting mandates** that align today's actions with the needs and obligations of future generations.
- **Heterarchical deliberative councils** that integrate diverse knowledge systems.
- **Youth as critical stakeholders** in multigenerational knowledge exchange, consensus-building and emerging intergenerational wisdom.
- **Learning as planetary practice.**
- **Infrastructures of care** as foundations for social and ecological resilience.

Combined, the reflections shared by our Lab participants in this report are intended as substantive propositions for wider development and potential implementation, following on the ambitions of the UN Declaration on Future Generations, Annex II of the UN Pact for the Future (UN, 2024).

The Lab was organized as one of the first in a series of carry-through activities following the UN Summit of the Future (20-23 September 2024) orientated to implementation of the Pact of the Future outcome document, as framed in the side event *From Idea to Action and Impact: mobilizing the outcomes of the Summit of the Future*.



Convened at UN headquarters in New York on 21 Sept 2024, this side event was organized by Member States The Republic of South Africa and The Kingdom of Thailand, in close collaboration with UNESCO's Management of Social Transformations (MOST) programme, UNESCO-MOST BRIDGES Coalition, the Julie Ann Wrigley Global Futures Laboratory of Arizona State University, the Wales Commissioner for Future Generations, the World Academy of Art and Science (WAAS), the Center for Science and Imagination and the Mary Lou Fulton Teachers College, ASU, University of Wales Trinity Saint David, The Club of Rome, Learning Planet Institute, Globethics, the School of International Futures, Leonardo/ISAST, the Tamkeen Community Foundation for Human Development and the InterAction Council.^[3]

The ideas contained in this report reflect the belief that governance for the future must be capable of responding both to risk and possibility, and must be co-designed for – and with – those who will inhabit futures we can only anticipate through acts of imagination.

In advancing these recommendations, the report foregrounds youth perspectives in the ongoing efforts to redefine rights, citizenship, justice, and planetary care.

^[3] The outcome report of the side event *From Idea to Action and Impact* can be accessed at <https://shorturl.at/YXODb>.

INTRODUCTION

For present generations, thoughts of the future are often fraught with uncertainty and anxiety. Everywhere we look, the future seems to press in on us – in rising temperatures, rising waters, rising rents, rising tensions. For many young people, the future feels less like a promise and more like a problem: inherited, overwhelming, and unevenly distributed. And still, we are compelled to imagine planetary futures – not because we are naïve, but because refusing to imagine is a form of surrender. Imagination is where responsibility begins. While many futures are imagined through technological or technocratic lenses, the youth who participated in this Lab invited us to envision futures on terms very different from those we have inherited – grounded in care, reciprocity, and the more-than-human world.

On March 14, 2025, 35 students from Arizona State University (ASU) and the Université Paris Cité / Learning Planet Institute (LPI), as well as young members of Je m'engage pour l'Afrique (JMA), gathered in Paris for a UNESCO Futures Literacy Lab titled Learning for Planetary Citizenship and Anticipatory Governance. Designed in collaboration with the UNESCO Futures Literacy team and the UNESCO-MOST BRIDGES Coalition, the Lab was hosted at the Learning Planet Institute (LPI), a place designed to nurture learning beyond the classroom, foster collective intelligence and empower communities

to imagine and build regenerative futures.

The architecture of the Institute – both physical and philosophical – offered more than a venue. It offered a provocation:

What if the very act of learning could be planetary?

What if a university could be a place not only of knowledge, but of responsibility, reciprocity, and regeneration?

And what if governance made space for those who have never been allowed to speak – rivers, trees, future generations, and the systemically unheard?

The goal was not to predict what may come next, but to practice different ways of seeing, sensing, conceptualizing, and shaping what might be possible by imagining and developing plausible scenarios for the future. Guided by UNESCO's Futures Literacy methodology and inspired by the Welsh model of intergenerational governance, the participants asked unorthodox questions. They visioned alternative solutions. They imagined wealth that could not be inherited, AI that could serve justice, and schools where learning replaced currency. They challenged the idea that



governance is the exclusive domain of experts and suggested instead that it might begin in community gardens, compost piles, and collective dreams.

The participants represented a tapestry of experiences and geographies. Students from Arizona State University and Université Paris Cité/Learning Planet Institute as well as young members of Je m'engage pour l'Afrique brought with them not only academic knowledge, but lived experience and embodied perspectives shaped by migration, environmental precarity, cultural memory, and political struggle. They reflected a remarkable diversity of languages, countries of origin, genders, abilities, and faith traditions – each shaping distinct ways of seeing and imagining the future. They identified as artists, engineers, poets, activists, biologists, researchers, and caretakers. Some came from countries already on the frontlines of the climate crisis. Others arrived with ancestral knowledge often excluded from institutional spaces. What united them was a shared commitment to

imagine – and insist on – futures worth inhabiting.

This report is the result of that Lab, approached as far more than an academic exercise. It is not a conclusive statement, but a constellation of contributions – field notes from those willing to dwell inside uncertainty and think from the perspective of the future. It is offered as a youth-led contribution to the living UN Declaration on Future Generations and as an active and potentially generative reflection on the principles of intergenerational solidarity and planetary responsibility set out in the UN Pact for the Future.

The Lab opened up a space for hope that imagination could not only inform policy, but help to transform it. What follows is an invitation to listen differently, to decide differently, and to belong to the future, together, through acts of imagination that build iteratively on one another, shaping a world in which future generations are not only expected to survive but to flourish and thrive.

RECONFIGURING FUTURES, TOGETHER: METHODS

Futures Literacy^[4], as developed by UNESCO, is not about predicting the future. It is about becoming aware of how and why we anticipate, enabling us to imagine different images of the future – and how those images shape what we do in the present. The Lab was structured in four phases, designed to invite participants to imagine different types of futures (probable, reframed, collective vision), to create awareness of how participants might feel about those futures, to reframe the probable and question their assumptions, and to develop a collective vision of a desired future, and a concrete action plan toward bringing that vision to life.

1. Sensing Probable Futures: Trend Mapping through STEEP+V

Participants began by mapping current trajectories across six domains—Social, Technological, Economic, Environmental, Political, and Values-based trends (STEEP+V). This enabled a systems lens on the topic at hand to ultimately identify what they believed to be most impactful (climate collapse, wealth disparity, community resilience) and most uncertain (AI ethics, nature equity, intergenerational rights). This created a shared starting point grounded in lived experience while also identifying priority action areas (most impactful, most uncertain).

2. Reframing the Future: Governing Otherwise

Participants were then introduced to speculative governance parameters – drawn from the Wales Protocol for Future Generations^[5] and UNESCO's Futures Literacy frameworks, including fluid governance (adaptive, data-informed sys-

tems), learning as currency, non-transferable wealth, the Earth's vote, planetary debt systems. Working in groups, they constructed **reframed futures**^[6] using these parameters and imagined what governance might look like if designed from these principles.

3. Persona Building & Causal Layered Analysis

Participants developed future personas – including rivers, AI programmers, whales, children, and teachers – to explore how different beings might experience governance in these futures. Persona building, inspired by design thinking, allows for participants to create relatable characters for those impacted by planetary citizenship. It reveals diverse needs and blind spots (non-obvious stakeholders), and supports better strategy and policy design. Through Causal Layered Analysis (CLA), Lab participants then unpacked headlines (litanies), structures (systems), worldviews, myths, and metaphors. This helped shift their thinking from surface problems to deep cultural assumptions and narrative frames.

4. Pitching & Backcasting

Finally, participants were invited to “pitch” their preferred future in the present tense, describing it as if it already existed, with the express intention of insisting that it works. They then backcasted, working backward to identify concrete milestones and actions needed to bring that world into being. Many of these ideas now appear as recommendations in this report.

^[4] The outcome report of the side event From Idea to Action and Impact can be accessed at <https://shorturl.at/YXODb>.

^[5] <https://www.futuregenerations.wales/wp-content/uploads/2024/05/Wales-Protocol-for-Future-Generations.pdf>

^[6] Reframed futures involve a tailored scenario introducing a disruption/provocation, as an anchor point to envision and invent new images of the future. Reframed futures are developed based on assumptions participants make in imagining probable futures.

Throughout the Lab, participants were encouraged to name and sit with their emotions, uncertainties, and inherited fears – not as barriers to rational thinking, but as valid knowledge fragments in themselves.

What follows is an invitation to listen differently, to decide differently, and to belong to the future, together, through acts of imagination that build iteratively on one another, actively shaping a world in which future generations are not only expected to survive but able to flourish and thrive. Futures Literacy here was not only a cognitive tool, but an emotional and relational practice.

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Figure 1. Futures Literacy & Foresight: A Capability Approach

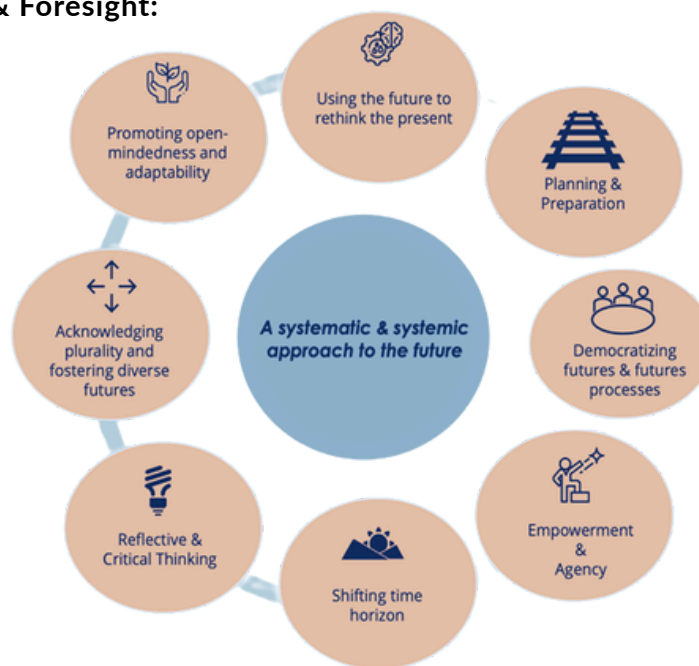


Figure 2. Futures Literacy Laboratories: Participatory Action Learning



WHAT EMERGED: PATTERNS, TENSIONS, AND POSSIBILITIES

Once immersed in the process of Futures Literacy, participants began surfacing insights that were often emotionally charged, politically sharp, and conceptually generative. Through STEEP+V mapping, persona development, reframing, and storytelling, new visions of governance and planetary belonging began to take shape. This section synthesizes the dominant patterns, core tensions, and speculative possibilities that emerged across groups.

Key Trends and Tensions

The collaborative work began by naming what was already in the room: anxiety, fatigue, longing, and quiet resistance. The future did not appear as a blank slate. It felt crowded – weighted with inherited crises and alive with visions held across generations. As participants traced the pulse of the present, they found themselves entangled in six interconnected threads (see Table 1):

- social
- political
- environmental
- economic
- technological, and
- moral

Within each domain, they identified tensions – complex realities shaped by history, identity, power, and possibility. Importantly, the words students chose did more than describe crises; they contested them. Through the use of metaphors and images, they unsettled dominant narratives that frame polarization as

inevitable, technology as destiny, growth as salvation, and nature as mere backdrop. In this sense, the tensions became invitations to think in deep time, to reckon with the legacies we hold, and to imagine what might unfold far beyond our own lifetimes.

These reflections reveal not only emotional and experiential dimensions of planetary crisis but also the discursive forces shaping them. Viewed through a Critical Discourse Analysis lens (Fairclough, 2023), they illuminate how language, media, and institutional narratives construct polarization, marginalize Indigenous lifeways, and naturalize power asymmetries in governance and technology.

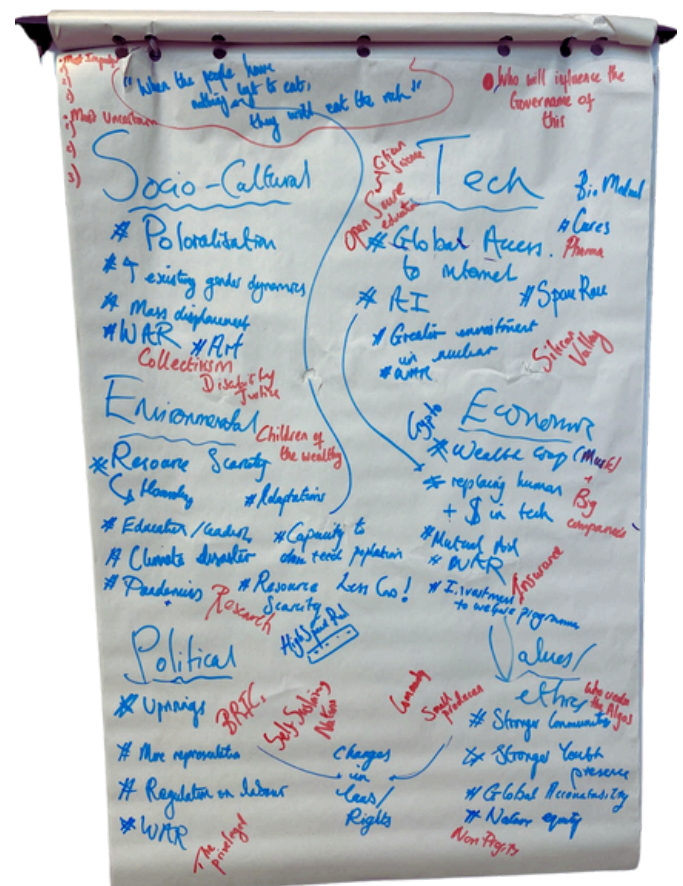


Table 1. The Most Impactful and Most Uncertain Trends for the Futures of Planetary Citizenship and Governance Identified by Participants

STEEP+V Category	Most Impactful Trends	Most Uncertain Trends
Social	Polarization; echo chambers; mass displacement; disconnection between generations	Future of community resilience; rise of collectivism; generational understanding
Technological	AI replacing jobs; unchecked technological acceleration; disinformation	AI rights and governance; inclusive design; planetary sensing tech
Economic	Wealth disparity; privatization of water and knowledge; extraction logic	Degrowth; redistribution; non-transferable wealth systems
Environmental	Climate collapse; biodiversity loss; greenwashing; food scarcity	Nature equity; planetary personhood; multispecies justice
Political	Far-right shifts; weak multilateralism; nationalist xenophobia	Rise of fluid governance; community-led diplomacy; participatory redesign of institutions
Values	Hyper-individualism; erosion of empathy; moral relativism	Rise of planetary ethics; more-than-human rights; revival of ancestral knowledge

In the **social fabric**, students saw fraying. Polarization was no longer just a problem of politics – it had become a condition of everyday life. “People live in echo chambers,” one participant said, “even within their own families.” There was grief over the generational disconnect, the loss of indigenous lifeways, and the loneliness baked into modern systems. But there was also a quiet refusal to accept these conditions. Youth imagined resilience not as an emergency response, but as relational infrastructure – mutual aid, local gardens, street libraries, communities that know each other’s names and lifestories. A critical observation emerged: many of the ‘futures’ being imagined already exist in contexts often dismissed as “underdeveloped.” This revealed how futures thinking can reproduce colonial temporalities, universalizing anxieties about lost connection while rendering invisible relational practices already functioning elsewhere. Planetary citizenship must also learn from what already works, not only what might work in a counterfactual or imagined reality (Byrne 2005).

Politically, the terrain felt unstable and unresolved. Youth spoke of fear as a kind of currency – spent strategically to win elections, redraw borders, and reinforce control. They named fascism without flinching, recognizing its return not as a historical anomaly, but as a present and growing force. They critiqued the hollowness of multilateral institutions that claim universality while excluding those most impacted by planetary crisis – youth, Indigenous peoples, displaced communities, and the more-than-human world.

Students mourned melting glaciers like lost relatives. They knew biodiversity collapse not as an abstract crisis, but as an unraveling of kinship.

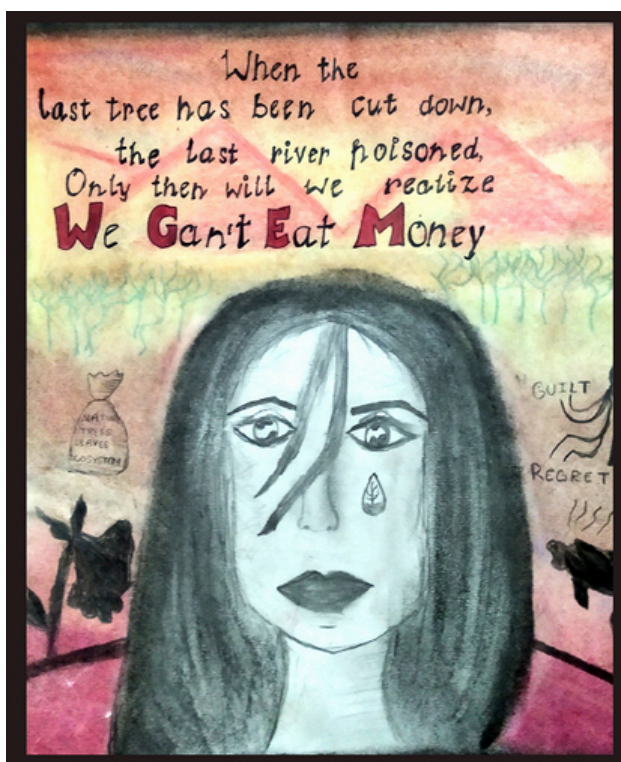
The **environment** was not separate from this grief. It was its cause and its witness. Students mourned melting glaciers like lost relatives. They knew biodiversity collapse not as an abstract crisis, but as an unraveling of kinship. Yet here, too, the most radical questions loomed: What if nature could vote? What if Earth had legal standing in courts and governance systems? What if governance didn’t just protect nature but took instruction from it?

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In the **economic domain**, rage arose – against extraction, against hoarding, against systems that privatize water and call it innovation. “You can’t eat money,” one student wrote. Another quoted Rousseau: “When the people have nothing left to eat, they will eat the rich.” Some students suggested that rather than rejecting the modern free market system altogether, we might redesign it along regenerative principles – shifting incentives so that innovation restores ecosystems rather than depletes them, and ensuring competitive advantage goes to supply chains and goods that keep human activity within planetary boundaries. As a whole, students recognized the urgent need for economic transformation to address these challenges. Still, in the shadow of collapse, they sketched new metrics: learning as currency, reciprocity as value, wealth that can’t be inherited but must be grown – together, with others, and with the land.



Artwork by Awantika, India
www.turnitaroundcards.org

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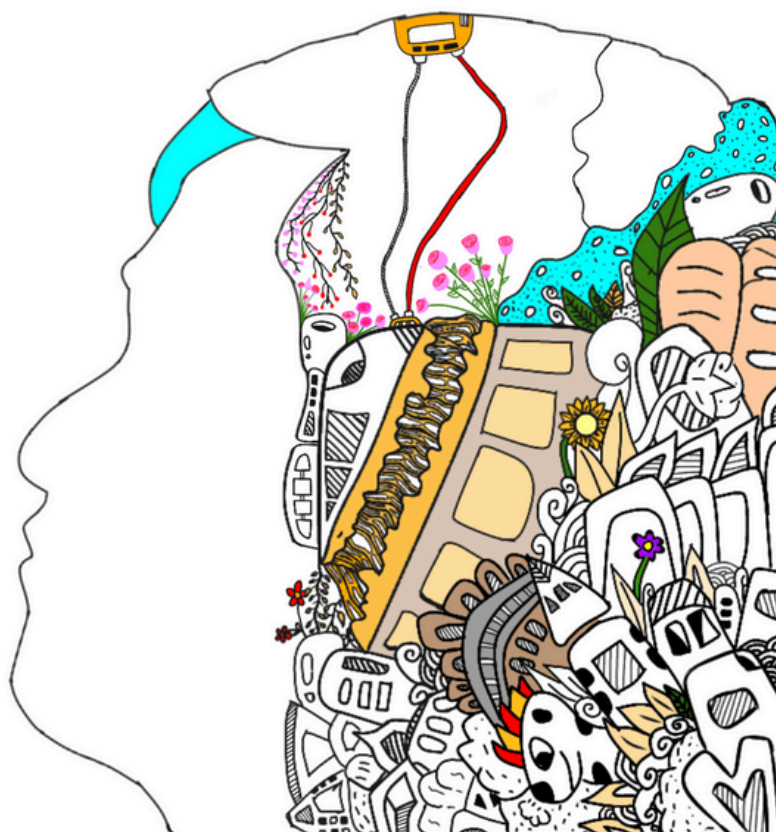
And finally, in the realm of **values**, the deepest questions surfaced. What does it mean to be good – or even resilient – in a world on fire? Can we learn empathy in an age of automation? How do we carry both anger and hope without breaking? Participants described living in contradiction: raised on self-maximization, hungry for mutual belonging. Disillusioned by institutions, still desperate to believe. The value shift they imagined was not subtle – it was seismic. From domination to humility. From extraction to kinship. From “me first” to “us, and more-than-us.” This reflects what Paulo Freire (1994) called the dialectic of despair and hope: the capacity of education to confront injustice critically, while at the same time generating new horizons of possibility. The Lab’s participants embodied this tension, holding both the grief of collapse and the insistence that another future can still be made.

Technology arrived like a storm: full of wonder, full of danger. AI was both a sacred tool and a spectral threat. Could it be trained to listen to the ocean, to translate the mourning songs of whales? Or would it, left unguarded, erase the last pockets of creativity and consent? Youth described being both enamored and unnerved – aware that digital futures depend less on invention than intention. They also recognized that artificial intelligence, though often framed as immaterial, has a material footprint: its data centers consume vast amounts of water and electricity, with disproportionate impacts on low-income communities and those of color (MIT News, 2025). The question was not what AI could do, but what kind of world we

The question was not what AI could do, but what kind of world we'd let it build. One group wrestled intensely with whether AI should have rights or merely responsibilities. Students argued that if AI becomes a "a tool with responsibilities," clarity is needed about *whose* responsibility it is to wield that tool ethically. Others worried that granting AI "rights" might create new entities that corporations could exploit to bypass human accountability. The tension remained unresolved—and perhaps instructively so. The rights framework collapsed when students realized: AI doesn't suffer from having its rights violated. Humans and ecosystems do. The question isn't whether AI deserves representation, but whose interests AI governance actually serves.

Artwork by Aung Zin Ko, Myanmar
www.turnitaroundcards.org

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TOWARD REWORLDING: REFRAMED IMAGINARIES AND PLANETARY FUTURES

If naming trends was an act of diagnosis, then reworlding was the first gesture of healing. After surfacing the frictions and fragilities of the present, participants were invited to step into possible futures, while recomposing reality. Through narrative, persona-building, and speculative design, they experimented with what Arturo Escobar (2018) might call ontological design – remaking the very conditions of how we know, feel, and organize life on Earth. Drawing on parameters inspired by the Wales Protocol for Future Generations and UNESCO’s (2023) Futures Literacy framework, participants reframed governance as something fluid, relational, and ecologically entangled. These were not mere worldbuilding exercises – they were what philosopher Gaston Louis Pierre Bachelard called ontoepistemic ruptures (Bachelard 1989), openings through which to *think and feel otherwise*.

Future Personas as Theory in Practice

The creation of future personas was also not merely an exercise in imagination – it was a method of ethical inquiry necessary in what has been termed relational governance (Rahman and Kumaraswamy 2008; Liu et al 2025). These characters, drawn from human and more-than-human worlds, were crafted to explore who is seen, heard, and counted in planetary futures. By inhabiting the perspectives of whales, rivers, teachers, trees, and even cows, participants confronted core questions:

- What does it mean to matter politically?
- Who has the right to decide?
- What are the limits of current ethical, legal, and economic frameworks?
- How might empathy, embodiment, and voice be expanded beyond the human?

This was, in effect, a collective practice of decentering the anthropocene – not just as a climate epoch, but as a regime of knowledge, power, and institutional design. Each group co-created a speculative world through the development of a Future Persona – a practice of relational ethics that explored what governance may look like when designed through the eyes of those historically excluded from it.



Participants reframed governance as something fluid, relational, and ecologically entangled.

This exercise challenged students to think beyond traditional norms concerning who counts as a stakeholder in both government and the ecological future of the earth. These personas became living thought experiments, each exposing a blind spot in dominant systems – what is taken for granted, what is overlooked, or actively denied – and offered, in miniature, prototypes for *governance otherwise*: a small but powerful reimaginings of who decides, whose knowledge counts, and what futures are worth living for.

Together, these personas advanced three quiet but radical moves:

- **Expanded representation:** Reframing who counts as a political stakeholder – not only citizens and corporations, but also rivers, caregivers, and future generations.
- **Shifted time horizons:** Reorienting governance away from short-term political cycles and toward ecological rhythms, intergenerational memory, and collective responsibility.
- **Redefinition of what counts as knowledge:** Challenging the primacy of expert-driven and elite decision-making, and elevating the wisdom held in bodies, communities, and ecosystems.

By stepping into the worlds of these Future Personas, we not only encounter imagined futures; we are asked to confront the conditions of the present: whose voices are excluded? which timelines are prioritized? and **what counts as valid knowledge**? Each persona holds a mirror to a blind spot in existing governance. In so doing, they help illuminate the deeper shifts required to make planetary citizenship not just a vision, but a living practice. In what follows, we explore how individual personas animate each of the three shifts, both as critiques and as entry points into new institutional imaginaries (see also Table 2).

Some personas force us to confront **who counts as a political subject**. The River, Palm Tree, Orca Whale, and Cow challenge the entrenched anthropocentrism of governance, showing that ecological systems and non-human beings are not simply the backdrop for human activity – they are active participants in our shared political and ecological fabric, bearing consequences, expressing needs, and sustaining life. This shift into *Expanded Political Representation* aligns with the growing recognition of the Rights of Nature (Gilbert et al. 2023). Another embodies gender expansiveness, reminding participants that planetary futures must recognize identities beyond Western binaries, reflecting long-standing gender diversity across cultures and throughout nature.

Planetary futures must recognize identities beyond Western binaries, reflecting gender diversity across cultures and throughout nature.

Yet other personas demand that we think in generational and ecological time rather than in election cycles or fiscal quarters. The Giraffe, with her elevated view, insists on decision-making that anticipates the needs of future generations. The Butterfly, whose migration links hemispheres, embodies the continuity and vulnerability of transboundary ecosystems. The Child/Student reminds us that education is an investment in futures we cannot yet see. These voices call for Shifted Time Horizons, reorienting governance toward lifecycles, seasons, and centuries. By embracing such shifts, we may discover the potential for overcoming what George Woodcock (1944) describes as “the tyranny of the clock.”

Still other personas disrupt our assumptions about **what counts as knowledge**. The Homeless Planter and Teacher & Mother show that lived experience, care work, and community practice are forms of expertise essential to sustainable governance. The Xochilt persona, a planetary representative in a heterarchical council, embodies the integration of Indigenous knowledge, science, and more-than-human signals. The Entrepreneur in Mali and the Girl in Oceania speak from contexts where ecological and social survival are deeply intertwined. These personas activate the shift toward *Redefined Knowledge*, where the intelligence carried in rivers, bodies, soil, and memory stands alongside – rather than beneath – technical expertise and other forms of privilege, whether socio-economic, educational, or institutional.

Many Future Personas inhabit more than one shift at once (see the Table 2 below). Together, they remind us that planetary citizenship is not an abstract aspiration – it is a lived practice. By making visible who and what is excluded – and by offering grounded, situated alternatives – they provide a generative vision of the institutional transformations required for a governance that is more just, more responsive, and more attuned to the interconnected realities of planetary life. These Future Personas demand that rights be extended not only across borders, but across species, generations, and forms of knowing. They ask us to reimagine governance not as a technical apparatus or fixed hierarchy, but as an evolving ecology of attention, accountability, and repair. And most of all, they take seriously the premise that governance is not just a structure. It is a story that we agree to tell together. And through these valorized personas, that story can begin again.

These personas activate the shift toward Redefined Knowledge, where the intelligence carried in rivers, bodies, soil, and memory stands alongside – rather than beneath – technical expertise and other forms of privilege.



Table 2. Future Personas: Exposing Blind Spots, Inspiring Prototypes and Propositions

Persona	Radical Shift(s)	Governance Blind Spot	Prototype Lever
Expanded Representation – who counts as a political subject?			
River	Knowledge, Representation	Ecosystems denied political voice	Ecological sentinels with veto triggers tied to ecological thresholds
Palm/Tree	Knowledge, Representation	Nature treated as property	Guardianship/trusteeship rooted in kinship with planetary lifecosystems
Orca Whale	Time Horizon, Representation	Ocean health externalized from policy	Protected migratory routes; marine guardians of ocean commons
Cow	Knowledge, Representation	Technocratic “green” sacrifice zones	Ethical review of AI-led sustainability grounded in planetary justice
Shifted Time Horizons – what timeframes govern?			
Butterfly	Time Horizon, Representation	Borders ignore ecological continuity	Bioregional councils aligned with planetary cycles
Giraffe	Time Horizon, Representation	Short-termism in governance	Planetary horizon keeps safeguarding long-term planetary wellbeing
Child/Student	Time Horizon, Knowledge, Representation	Learning undervalued as civic contribution; gender expansiveness erased by binary governance frameworks	Learning as planetary practice tied to intergenerational responsibility; recognition of gender diversity as foundational to representation

Table 2. Future Personas: Exposing Blind Spots, Inspiring Prototypes and Propositions (continued)

Persona	Radical Shift(s)	Governance Blind Spot	Prototype Lever
Redefined Knowledge – what forms of knowing carry force?			
Homeless Planter	Knowledge, Representation	AI & climate policy punish the poor	Care-as-infrastructure with planetary equity checks; contestable AI
Teacher & Single Mother	Knowledge, Representation	Care work excluded from governance frameworks	Planetary care budgets & infrastructures of interdependence
Plumber	Representation	Class-based exclusion from political voice	Occupational representation within planetary governance forums
John Doe at Sea	Representation	Post-national, jurisdictional voids	High-seas planetary commons charter
Xochilt	Knowledge, Representation	State- and expert-only diplomacy	Hybrid planetary councils (guardians + proxies + data stewards)
Girl (Oceania)	Knowledge, Representation	Separation of human and planetary rights	Integrated planetary rights framework linking human and more-than-human
Entrepreneur (Mali)	Knowledge, Representation	Economic survival denied representation	Cooperative planetary finance tied to ecological and social indicators

FROM PERSONAS TO PROPOSITIONS: TRANSLATING IMAGINATION INTO INSTITUTIONAL DESIGN

The Future Personas developed in the Lab enabled recognition of blind spots in dominant systems that helped illuminate different ways of organizing power, voice, care, and accountability. These serve as guiding orientations and speculative frames, offering contributions to the deeper normative architecture that can help shape a meaningful commitment to future generations.

This section carries those insights forward, translating the shifts suggested by the Future Personas – expanded forms of representation, longer time horizons, and reimagined knowledge systems – into tangible propositions for future governance. These include guardianship, ecological sentinel systems, future generations assemblies, youth as crucial stakeholders in multigenerational knowledge exchange, learning economies, heterarchical deliberative councils, and care-based public infrastructure. Together, these propositions illustrate how such transformations might take root – in schools, parliaments, community gardens, UN forums, and bioregional councils – not as universal solutions, but as situated interventions: context-specific, accountable, and grounded in the lived realities endemic to the specific personas.

What follows introduces each proposition as an institutional rehearsal for governance otherwise – and a concrete contribution to the living UN Declaration on Future Generations.

I. Expanded Representation — who counts as a political subject

The first radical shift activated by the Lab was the recognition that governance must be opened to voices beyond the human. If law and policy continue to treat ecosystems, species, and caregivers as externalities or dependents, future generations inherit only institutions of exclusion. The River, Palm Tree, Orca Whale, and Cow personas brought this blind spot to the surface with force and clarity: they revealed that ecological and more-than-human systems are not mere backdrops for politics, but participants whose well-being and thresholds shape collective (including human) survival. Propositions such as **Ecological Sentinel Systems** and **Guardianship** illustrate how such representation might be institutionalized – not as metaphor, but as embodied and operational design.



Artwork by Elena Goddard, Chile
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- **Ecological Sentinel Systems – listening as authority**

In the Lab, students imagined what governance would look like if rivers, forests, and whales could cast votes. The River persona reminded participants that oxygen drops already signal distress; the Orca, that shipping noise disrupts migration routes; the Palm Tree, that slow die-back carries its own warning. From these insights emerged the idea of Ecological Sentinel Systems: agreed ecological thresholds – temperature spikes, biodiversity collapse, chemical distress – that trigger automatic political response. This mirrors the planetary boundaries framework (Rockström et al., 2009; Steffen et al., 2015), which identifies critical ecological limits that define a safe operating space for humanity and warn against transgressions that endanger future generations, or the World Scientists Warnings to Humanity on biodiversity loss and climate emergency (Ripple et al. 2017, 2020).

When a threshold is breached, harmful activities must stop, reviews must convene, and decision-makers must justify their actions in public. Data is drawn not from sensors alone, but from a plurality of evidence and knowledge systems: Indigenous knowledge, community observation, and scientific data woven together as a foundation for collective action. This is governance that listens differently. It reframes ecological change as a political voice – and requires institutions to answer.

**Proposed implementation principle 1:
Right to be heard beyond words**

Ecological thresholds that evidence harm shall trigger review, suspension of harmful activities, and public justification of action.



Artwork by Vadim Kim, Kyrgyzstan
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- **Guardianship – standing for the more-than-human**

If the River can signal harm, who carries its claim into the forum of decision-making? In the Lab, students proposed the idea of Guardianship as legally mandated representatives who speak and act on behalf of ecosystems and species. These guardians hold fiduciary duties of care, disclosure, and independence, ensuring that rivers, forests, and animals have advocates in political and legal arenas. They can intervene in planning processes, demand remedies when thresholds are breached, and ensure that ecological interests cannot be sidelined. The Palm Tree's ethic of kinship, the River's distress signals, and the Cow's vulnerability to "optimization" logics each reinforce the need for advocacy grounded in stewardship.

This idea builds on emerging Rights of Nature legislation—including legal personhood for the Whanganui River in Aotearoa New Zealand and related cases in Ecuador, Bangladesh, and Mexico (Kauffman & Martin, 2017)—demonstrating that guardianship already has real-world precedent. The Constitution of the Republic of Ecuador from 2008 is an early example of a state incorporating the rights of nature into a national constitution, recognizing “that humankind and Nature share a fundamental, non-anthropocentric relationship given our shared existence on this planet” (UN Harmony with Nature): “Nature, or Pacha Mama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes” (Article 71. Constitution of the Republic of Ecuador, in UN Harmony with Nature). Guardianship reframes legitimacy as responsibility exercised on behalf of beings who cannot vote or litigate, yet whose survival and well being are mutually implicated in our own.

**Proposed implementation principle 2:
Standing for living systems**

Ecosystems and species shall be represented through legally mandated guardians with enforceable duties of care and protection.

Together, these propositions suggest how expanded representation can move from recognition to institutional practice. Ecological thresholds become signals that command a response; guardianship becomes stewardship encoded in law. In both cases, the circle of political community is widened – ensuring that future generations inherit not only ecosystems, but systems that know how to listen to and act on their behalf.



Artwork by Lindsey Millerd, Hawaii, USA
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II. Shifted Time Horizons — how decisions hold intergenerational memory

The second significant shift identified in the Lab as necessary arose from the recognition that governance must be accountable across lifetimes, not just election cycles. If institutions continue to privilege the short-term, future generations will inherit only systems of crisis and delay. The Giraffe, the Butterfly, and the Child/Student personas called participants' attention on this unresolved dilemma, suggesting that lifecycles, migrations, and intergenerational memory must anchor decisions. Propositions such as Future Generations Assemblies and Backcasting Mandates illustrate how this temporal accountability can be institutionalized - not as rhetoric, but as enforceable design.

- **Future Generations Assemblies – the future as a constituency**

In the Lab, students named “fear as currency” in politics and asked how decisions could be accountable beyond election cycles. The Child/Student persona reminded them that education invests in futures not yet visible; the Giraffe demanded perspective across lifetimes; the Butterfly revealed the fragility of cross-border migrations. From these insights came Future Generations Assemblies: standing bodies with the authority to review and co-sign decisions whose impacts extend more than 15 years. Convening in schools, parliaments, and even UN fora, these assemblies would publish future impact statements and require backcasting to hold today's choices to the measure of tomorrow's generations.

Proposed implementation principle 3: Intergenerational co-decision

Policies with long-term impacts shall require review and co-signature by youth and future assemblies.



Artwork by Muslima Khabisherova, Uzbekistan
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- **Threshold & Backcasting Mandates – time as constraint**

Students were frustrated by short-termism, naming “fear as currency” in politics and asking how decisions could be held to account across generations. The Giraffe persona suggested the need for perspective beyond electoral cycles and lifetimes; the Butterfly epitomized the fragility of ecological migrations and seasonal rhythms. These discussions yielded the proposition of **Threshold & Backcasting Mandates**: governance rules that bind present action to long-term responsibility by anticipating lifecycles and tipping points. Backcasting flips the logic of planning: instead of projecting from today’s crisis, institutions begin with preferred futures grounded in planetary health and wellbeing, and then work backward to align present choices. Thresholds serve here as orientation points, keeping human activity within the safe operating space identified by planetary boundaries framework (Rockström et al., 2009; Steffen et al., 2015), which warns that crossing ecological and Earth-system limits unleashes cascading impacts across generations.

Proposed implementation principle 4: Temporal accountability

Long-term planning shall begin from preferred futures that safeguard planetary health and intergenerational wellbeing, with present action aligned through backcasting.



Artwork by Daniela Plascencia, Mexico
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Together, these propositions imply that time itself must be treated as an ethical boundary. Future Generations Assemblies activate not only the often-marginalized youth contingent of present generations, who will have no choice but to live with the effects of decisions and actions undertaken in the present, but also future generations who are given no direct say in these decisions and therefore require fiduciary representation. Backcasting Mandates in turn create institutional brakes against the always endemic risk of short-termism. Both expand the temporal reach of governance, ensuring that future generations are not symbolic references but recognized as real constituents in today’s decisions.

III. Redefined Knowledge — what forms of knowing carry force

The third required shift identified in the Lab was the necessity of governance drawing on more than technical expertise as effectively delimited and operationalized in the science-policy interface of present multilateral and intergovernmental systems. If institutions continue to privilege narrow forms of data and analysis while excluding care, lived experience, Indigenous wisdom, and more-than-human sensing, future generations will inherit systems that continue to undervalue the full range of knowledges needed to sustain life.

The personas of Xochilt, the Teacher & Mother, the Homeless Planter, and the Girl in Oceania brought this blind spot to the surface with urgency, showing that power in governance rests not only in making decisions, but in admitting whose knowledge is allowed to shape these choices. Propositions such as Hybrid Deliberative Councils, Learning as Civic Contribution, and Care-Based Public Infrastructure illustrate how epistemic plurality might be institutionalized – not as limited, passive or token consultation with marginalized communities and interests, as too often characteristic of present intergovernmental processes of deliberation, negotiation, and agreement, but as an operational design principle of governance.

- **Heterarchical Deliberative Councils – governance by planetary composition**

In the Lab, the persona of Xochilt convened a council where Indigenous leaders, scientists, lived-experience experts, and guardians of ecosystems deliberated alongside AI translators. Student participants stressed that

authority arises not from unanimity, but from composition of diverse planetary knowledge systems and representative voices of those unable to speak for themselves (e.g. fiduciary representatives of Nature or future generations): deliberative consultations that transparently weigh scientific data, ecological sensing, ancestral wisdom, and community testimony together.

Hybrid councils require reason-giving across different knowledge systems and mandate that any AI mediation remain explainable and contestable. Designed for complexity, such councils embed ontological plurality in governance, turning decision-making into a practice of planetary composition and stakeholding, enabling diverse systems of knowledge and respect for the personhood of not-yet-born and more-than-human stakeholders to shape just and sustainable planetary futures.



Artwork by Pinnate Khairunnisa, Indonesia
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This mode of governance correlates with noteworthy concepts and initiatives that animated further discussions following the Lab in the preparation of the present report. Among these were frameworks for Planetary Boundaries Diplomacy^[7] and Planetary Diplomacy^[8], as well as a Global Alliance^[9] supporting universal adoption and implementation of legal systems that recognize, respect and enforce “Rights of Nature” and a UN initiative focused on Harmony with Nature^[10] supporting Rights of Nature legislation, jurisprudence, scholarship and education. Together these frameworks and initiatives constitute significant resources on which the development of Hybrid Deliberative Councils can draw.

Proposed implementation principle 5: Epistemic and ontological plurality

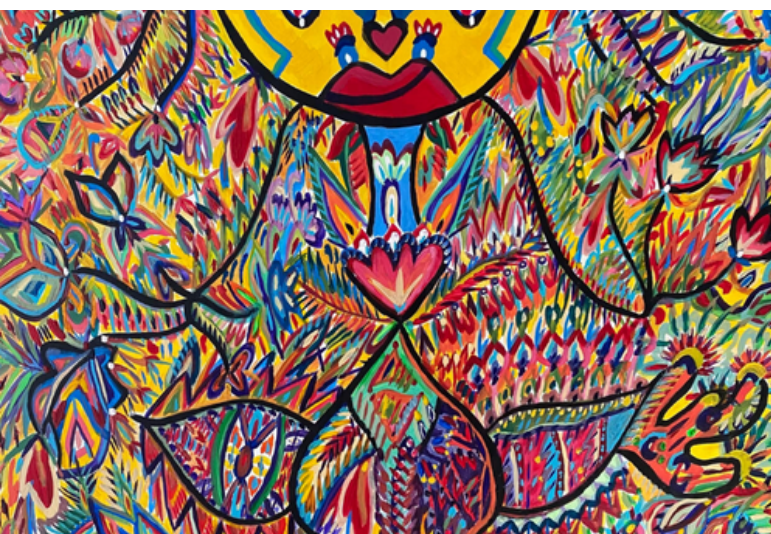
Major planetary and public decisions shall be reviewed by councils that integrate scientific, Indigenous, lived, and more-than-human knowledge traditions, respecting the rights, interests and legal personhood of non-human stakeholders and those not yet born.

• Learning as Planetary Practice – education as world-making

The Child/Student persona reminded participants that education is not only preparation for governance, but part of the governance process itself. Students envisioned learning as a form of planetary practice: acts of mentoring, repair, translation, or community and citizen science that help to braid diverse human and ecological communities at various scales confluent into shared engagement and responsibility for a common Earthly home. This practice is not confined to classrooms or human-centered systems. It means learning with and from the planet and all its inhabitants – human and more-than-human alike – recognizing rivers, soils, pollinators, and ancestral memory as teachers. Rather than being reduced to credentials or private gain, such learning becomes a form of participation in planetary governance. In this framing, learning is a way of becoming a planetizen, one who learns in order to care for the Earth and its more-than-human communities (Taddei, 2022).

Proposed implementation principle 6: Learning as planetary practice

Education shall be recognized as a responsibility to learn with and from the planet and all its inhabitants, as an act of world-making for the common good.



Artwork by Delfina Stagliotti, Argentina
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[7] <https://climate.sustainability-directory.com/term/planetary-boundaries-diplomacy/>

[8] <https://swissnex.org/planetary-embassy/>

[9] <https://www.garn.org/>

[10] <http://www.harmonywithnatureun.org/>

- **Planetary Infrastructures of Care – designing for interdependence**

The Teacher & Mother and Homeless Planter personas highlighted how care is systematically excluded from governance frameworks and budgets. Students envisioned various examples of **care-based infrastructure** – shared housing and kitchens, shade and water systems, compost and food webs, disability-inclusive design, and caregiver stipends. Crucially, caregivers and recipients themselves would hold seats in decision-making. By embedding care directly into planning and resources, governance would reposition care as a phenomenon treated as an afterthought, or in worst cases as invisible and unaccounted, to a recognized principle at the foundation of collective resilience – not only for communities, but for planetary life-systems. Care becomes visible and accountable without being reduced to metrics, grounding governance in the infrastructures that sustain life across generations and species.

**Proposed implementation principle 7:
Care as foundation**

Governance shall build and sustain planetary infrastructures of care and repair, with caregivers and care recipients guaranteed a voice in decision-making.

Together, these propositions dismantle the assumption that only technical expertise counts. Hybrid councils compose many forms of knowledge; learning as planetary practice reframes education as responsibility to the planet and its inhabitants; and infrastructures of care make interdependence visible and actionable. Each widens the epistemic and rights-based political foundation of governance, ensuring that future generations inherit not just institutions of power, but institutions of learning, listening, and care.

In sum, the Futures Literacy Lab recognized how governance is currently organized, imagining and addressing its evolution in light of three shifts necessary to practice a governance model fit for the purposes and ambitions of the UN Declaration on Future Generations. Expanded Representation widens the circle of political community to include ecosystems, caregivers, and future generations. Shifted Time Horizons treats time itself as an ethical boundary, embedding intergenerational voice and long-view accountability into decision-making. Redefined Knowledge reconfigures the normative model of technical expertise rigidly established in the science-policy interface of late 20th and early 21st century governance processes (intergovernmental, multilateral, state and sub-state), elevating care, lived experience, Indigenous wisdom, and more-than-human sensing as coequal forms of guidance. Each of these propositions offers evidence of how youth drawn from a wide range of geographical, cultural and social contexts imagine planetary governance that can be, and must be, both relational and anticipatory, if it is to meet the challenges of the extended arc of life on Earth over the remainder of the current century and beyond.

The next section translates these orientations into preliminary recommendations for action—concrete steps that institutions, from schools to parliaments to UN forums, can take to pilot, adapt, and scale the futures rehearsed in the Lab. These recommendations are presented not as ends in themselves but as starting points for necessary continued refinement, enabling renewed principles of governance fit for foreseeable planetary futures to be established, actioned and implemented for the collective good and flourishing of the Earth and its constituent human and ecological communities.

RECOMMENDATIONS – PATHWAYS OF ACTION

The Futures Literacy Lab on Learning for Planetary Citizenship and Anticipatory Governance demonstrated that governance for future generations requires expanded representation, shifted time horizons, and redefined knowledge. The shifts envisaged by the youth participants, organizers and facilitators of the Lab cannot remain mere thought experiments. They must be piloted, adapted, and scaled across the living fabric of governance – spanning classrooms and communities, cities and watersheds, parliaments and bioregions, global institutions and planetary commons. The identified pathways below suggest where this work can begin – from schools to the United Nations – and outline actions that can be taken in each of these contexts to help bring the Declaration on Future Generations to fruition.

In Schools and Learning Communities

- Pilot Future Generations Assemblies as standing bodies within schools, community organizations with learning mandates and universities, vesting them with real authority to review policies on curriculum, sustainability, campus planning and initiatives co-developed together with community partners.
- Embed learning as planetary practice across education institutions and levels, where education is framed as learning with and from the planet and its inhabitants.
- Value artistic expression as legitimate knowledge, allowing students to present futures work through song, visual art, or performance alongside traditional reports, recognizing that governance visions require forms of expression beyond policy language.
- Encourage collaboration and meaningful dialogue among students, using the curriculum, future generations protocols or futures implementation toolkits developed by authorities like the Office of the Wales Futures Generations, or by organizations and institutions such as UNESCO, BRIDGES, LPI or ASU Global Futures Laboratory (or others) as frameworks for critical thinking and impact-based co-creation. Education equips students to engage the world and drive collective change, reminding us that the future cannot be built alone.
- Recognize repair, mentorship, and care work as contributions to planetary governance.
- Allow space for levity, humor, and non-traditional expressiveness in education and governance, honoring youth by letting them surprise us with the solutions that may seem fantastical or whimsical, but open new imaginative horizons.



Artwork by Semridha Roy, India
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In Villages, Cities and Bioregions

- Establish Guardianship structures or actors for rivers, forests, and ecosystems within municipal charters and bioregional councils.
- Implement Ecological Sentinel Systems to treat ecological thresholds as binding signals for action.
- Invest in Planetary Infrastructures of Care – water systems, food webs, care hubs, and community-based mentorship networks—that sustain interdependence across species and generations.

In Global Institutions

- Convene Heterarchical Deliberative Councils within the UN system to integrate scientific, Indigenous, lived, and more-than-human knowledge traditions, reinforcing that listening across differences is a vital form of cooperation.
- At the level of UN organizations, establish Youth and Intergenerational Future Generations Envoys and Special Rapporteurs, as well as Future Generations Assemblies as permanent bodies, to monitor, help develop and co-sign policies with intergenerational impact – aligning these roles and bodies with the promised office of the UN Envoy for Future Generations – anchoring legitimacy across generations and helping rebuild trust in multilateral institutions.
- Anchor planetary guardianship, temporal accountability, and epistemic plurality within the Declaration on Future Generations and the Pact for the Future, providing international education cooperation with robust ethical and ecological foundations.

In Parliaments and Policy Arenas

- Require intergenerational impact assessments, statements and backcasting in all long-term legislation and budgets.
- Create standing committees for future generations and planetary wellbeing, with authority to pause or review harmful actions.
- Guarantee youth delegates stakeholder rights in development and decision-making on policies whose impacts extend beyond a generation.
- Measure success by whether systems regenerate conditions conducive to life across species and generations, not just human economic metrics.



Artwork by Austin Emmanuel L. Saulong, Philippines
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The kinds of measures suggested in this report also need to be augmented and refined through continuous co-engagement among an expanding network of actors (Member States, Civil Society, Academia and diverse Communities of Knowledge, Action, and Purpose, including Local, Traditional and Indigenous communities), all of whom are stakeholders in the Earth's Planetary Futures.

Notable propositions arose in the Lab and in the preparation of this outcome report that could not be fully developed immediately. One example is the idea of Rethinking Borders: reimagining political and ecological boundaries as sites of relation rather than division, inviting forms and modes of governance that move across territories, generations, and ecological systems. Though this proposition could not be followed through on in the immediate context of the Lab as a result of limitations of time and space, it may well deserve wider consideration, as may other prospective principles of future planetary governance not given space on the occasion of Lab held in Paris in March 2025.

For this reason implementation pathways deserve careful consideration as the focuses of planned follow through activities, to move ideas further along the trajectory of needs and principles articulated, shared, analyzed and discussed toward potential approaches developed and strategies designed for implementation in real-world contexts.

The UNESCO Futures Literacy Lab Learning for Planetary Citizenship and Anticipatory Governance was itself a step in the direction of developing principles articulated at UN headquarters in New York in September 2025, in the event From Idea to Impact: mobilizing the Outcomes of the Summit of the Future. By the same token, its propositional outcomes will serve as the basis of successive labs and workshops during 2026, now being designed by the co-organizers at UNESCO headquarters and Learning Planet Institute in Paris, as well as at Arizona State University and additional UNESCO-MOST BRIDGES hubs internationally. These events and activities will serve to further refine futures governance strategies, frameworks and toolkits for implementation for the benefit of Member States, policymakers and other actors whose inclusion are all necessary in the framing and delivery of secure, resilient and flourishing planetary futures for our common home, the Earth.

Closing Note

These pathways are invitations to act across scales. Pilots in classrooms, neighborhoods, and watersheds can grow into reforms in parliaments and UN fora. In this way, the prototypes rehearsed in the Futures Literacy Lab can be woven into the living architecture of planetary governance – ensuring that the Declaration on Future Generations is not only a text, but a practice.

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Workshop Participants – for their imagination, courage, and insight during the Lab.

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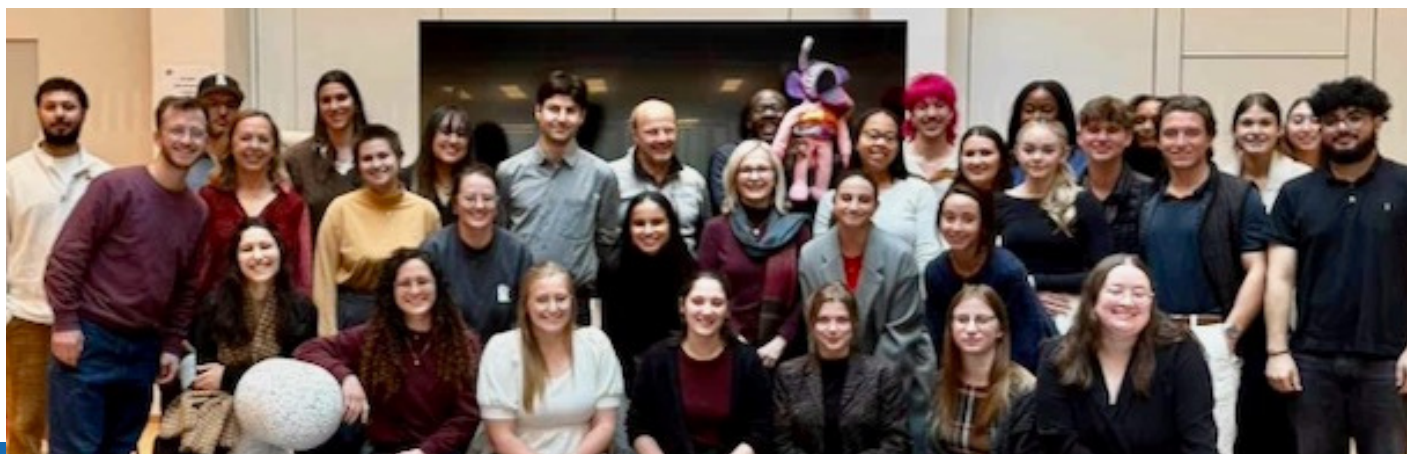
Edward Stevenette, Nsah Mala, Joni Adamson, Iveta Silova, Steven Hartman, Christine Kavazanjian, Léa Chaussis, Camille Guinet, María Angélica-Mejía Cáceres

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Report Design – Iveta Silova, Steven Hartman and Sophie Spooner

Together, these contributions highlight the essential role of youth-led imagination in advancing governance for planetary futures.



REFERENCES

- Bachelard, G. (1986). *The Formation of the Scientific Mind: A Contribution to a Psychoanalysis of Objective Knowledge*, Beacon Press.
- Byrne, R. (2005) *The Rational Imagination: How People Create Alternatives to Reality*. MIT Press.
<https://doi.org/10.7551/mitpress/5756.001.0001>
- Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds*. Duke University Press.
- Fairclough, N. (2023). *Critical Discourse Analysis. The Handbook of Discourse Analysis* (2nd edn, eds Handford, M. & Gee, J. P.). Routledge.
- Freire, P. (1994). *Pedagogy of hope: Reliving pedagogy of the oppressed*. Continuum.
- Gilbert, J., Macpherson, E., Jones, E., Dehm, J. (2023). The Rights of Nature as a Legal Response to the Global Environmental Crisis? A Critical Review of International Law's 'Greening' Agenda. In: Dam-de Jong, D., Amtenbrink, F. (eds) *Netherlands Yearbook of International Law 2021*. Netherlands Yearbook of International Law, vol 52. T.M.C. Asser Press, The Hague. https://doi.org/10.1007/978-94-6265-587-4_3
- Liu, Y., Mao, S., Zhang, B., Xu, Q., & Zhu, Q. (2025). Relational Governance and Project Performance: Unveiling the Mediating Role of Organizational Resilience. *Buildings*, 15(10), 1585.
<https://doi.org/10.3390/buildings15101585>
- MIT News. (2025, January 17). [Explained: Generative AI's environmental impact](#). Massachusetts Institute of Technology.
- Rahman, M. and Kumaraswamy, M. (2008)- Relational contracting and teambuilding: Assessing potential contractual and noncontractual incentives. *J. Manag. Eng.* 24, 48-63.
- Ripple, W. et al. (2017). "World Scientists' Warning to Humanity: A Second Notice." *BioScience* 67, no. 12 (December): 1026-28. <https://doi.org/10.1093/biosci/bix125>
- Ripple, W., et al. (2020). "World Scientists' Warning of a Climate Emergency." *BioScience* 70, no. 1 (January): 8-12. <https://doi.org/10.1093/biosci/biz088>
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., de Wit, C. A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., ... Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461(7263), 472-475. <https://doi.org/10.1038/461472a>
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., ... Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223). <https://doi.org/10.1126/science.1259855>
- Taddei, F. (2022). *The Planetizen Manifesto*. Learning Planet Institute.
- UNESCO (2023). *Futures literacy laboratory playbook: an essentials guide for co-designing a lab to explore how and why we anticipate*. <https://unesdoc.unesco.org/ark:/48223/pf0000385485>
- UN (2024). *The Pact for the Future : resolution / adopted by the General Assembly. A/RES/79/1*. <http://digitallibrary.un.org/record/4061879>
- UN. *Harmony with Nature, Rights of Nature Law and Policy database*. <http://www.harmonywithnatureun.org>
- Woodcock, G. (1944). *The Tyranny of the Clock*. War Commentary.

UNESCO FUTURES LITERACY LAB REPORT

REWORLDDING PLANETARY GOVERNANCE

YOUTH CONTRIBUTIONS TO THE IMPLEMENTATION
OF THE UN DECLARATION ON FUTURE GENERATIONS



‘Governance for the future must be capable of responding both to risk and possibility, and must be co-designed for — and with — those who will inhabit futures we can only anticipate through acts of imagination.’
