

Concept Note: AI-Enhanced Model UN for Global Impact & Youth Empowerment

1. Introduction

This concept note outlines a collaborative project between UNU Macau and the Learning Planet Institute (LPI) to pioneer an AI-Enhanced Model United Nations (AI-MUN) initiative. This project leverages our respective strengths in AI research, agent-based modeling (UNU Macau), and innovative educational paradigms (LPI). Our vision is to transform the traditional Model UN experience by strategically integrating advanced Artificial Intelligence tools. This will not only deepen delegates' understanding of complex global issues and enhance their policy-making skills but also create tangible pathways for youth perspectives to be synthesized, amplified, and contribute to global governance dialogues, including those at the United Nations.

2. Understanding Model UN: Core Concepts & Terminology

Model United Nations (MUN) is an educational simulation where students learn about diplomacy, international relations, and the United Nations.

Term	Definition
Committee	A simulated UN body (e.g., General Assembly, Security Council, ECOSOC) where delegates discuss specific topics on the agenda.
Delegate	A student acting as a representative of a country, organization, or specific viewpoint within a MUN committee.
Background Guide	A document prepared by conference organizers (chairs) that provides an overview of the committee's topics, including historical context and data.
Position Paper	A short essay prepared by a delegate before the conference outlining their assigned country's/role's stance on the committee topics.
Working Paper	A document drafted by delegates during committee sessions, outlining preliminary ideas, specific clauses, or consensus. It is less formal than a draft resolution and often serves as a stepping stone towards it.
Draft Resolution	A formal document written by delegates proposing solutions to the issues being debated. It follows a specific UN format. The main objective of a committee is to develop and pass such resolutions.
Chair	A student or faculty member who moderates debate, enforces rules of procedure, and guides the committee's work.
Moderated Caucus	A formal debate format where delegates raise their placards to be called upon by the Chair to speak.
Unmoderated Caucus	An informal debate format allowing delegates to move freely, discuss, and draft resolutions collaboratively.

3. Enhancing Model UN with Artificial Intelligence: A Phased Approach

We propose a multi-phase approach to integrate AI into the MUN lifecycle, creating a richer, more impactful, and inclusive experience.

Phase 1: Pre-Conference AI-Powered Preparation & Research

Objective: To equip delegates with sophisticated AI tools for comprehensive research and preparation, enabling a deeper understanding of agenda topics.

Initiative 1.1: Development of an AI Tool for MUN

- **Description:** Creation of a Large Language Model-based platform “**ChatMUN**”. This AI tool will be trained and fine-tuned (utilizing Retrieval Augmented Generation for accuracy and reducing hallucination) to retrieve, analyze, and synthesize information from a wide array of sources including UN documents, official UN reports, international treaties, national policies, academic publications, and credible news sources.
- **Functionality:**
 - Delegates will be able to use natural language queries related to their committee topics, country positions, and specific policy areas to retrieve information, direct source links, and potentially comparative analyses of different stances.
 - Chairs can provide curated databases, academic literature, and official report repositories. Delegates will use the ChatMUN to analyze complex data sets, and rapidly understand papers and reports in fields new to them.
- **Youth Co-Design:** We will actively involve youth (potential MUN participants) in the design and testing phases of this AI tool. Workshops and feedback sessions will be organized to ensure the tool’s interface, features, and information delivery are user-friendly, relevant, and genuinely useful for MUN preparation, thus embedding youth perspectives directly into the AI’s development.

Phase 2: Agentic AI Integration During the Conference

Initiative 2.1: AI Digital Envoys for Enhanced Representation

- **Description:** Design and deploy specialized LLM-based AI agents to act as “Digital Envoys” within committee sessions. These AI agents will be tasked with representing perspectives that are often underrepresented, voiceless, or difficult to articulate in traditional MUN settings.
- **Implementation Scenarios:**
 - **Voiceless Groups:** An AI agent could represent marginalized communities, refugees, or indigenous populations by synthesizing publicly available data, reports from NGOs, and testimonies to articulate their unique challenges and priorities.

- **Future Generations/Non-Human Entities:** AI agents could be designed to present arguments based on long-term sustainability models for future generations or to advocate for environmental protection by representing the “interests” of ecosystems or different species, based on scientific data and ethical frameworks.
- **Participation:** These AI Digital Envoys could participate in moderated debates or serve as expert resources in special committee hearings, providing unique data-driven or ethically distinct viewpoints.

Phase 3: Agent-Based Modeling Integration

Initiative 3.1: Integrated Policy Simulation with Agent-Based Modeling (ABM)

- **Description:** Introduce delegates to ABM tools directly within the MUN sessions, leveraging UNU Macau’s expertise. This integration is a potential game-changer for the MUN process, moving beyond theoretical debate to applied policy exploration. These models, potentially integrating LLMs as the decision-making “brains” of individual agents, allow for the simulation of complex social or environmental systems.
- **Process:**
 - Delegates engage in debate and collaboratively draft clauses, working papers, draft resolutions detailing proposals, initiatives, or points of consensus.
 - Then they can input variables derived from these emerging views and policies (e.g., funding allocations, regulatory changes, international cooperation levels) into ABMs developed by UNU Macau.
 - Delegates will observe the simulated short-term and long-term outcomes on relevant indicators (e.g., poverty reduction, carbon emissions, resource depletion) in real-time. This direct integration allows for immediate application and understanding of policy dynamics.
 - (Optional) Delegates may also, through a formal motion or chair guidance at an appropriate juncture, request a specific ABM simulation. For example, if some delegates propose to increase tariffs regionally, the delegates who oppose them can request an ABM simulation to demonstrate the consequences of this policy.
- **Dual Benefits:**
 - **Educational Advancement:** Provides a dynamic, hands-on learning experience where delegates can test their ideas and see potential consequences, transforming MUN into an interactive policy laboratory.
 - **Incorporating Youth Voices into AI & Model Design:** Crucially, this process allows youth delegates to actively shape the simulation models. Their choices, assumptions, and priorities directly influence the model parameters and scenarios. This participatory approach ensures that the modeling tools and their outputs are not just consumed by youth but are co-created and validated by their perspectives, making the models themselves a product of youth engagement. (Successful implementation could even inform discussions on deploying similar exploratory tools in actual UN deliberations).

Phase 4: Post-Conference – Amplifying Youth Impact and Knowledge Sharing

Initiative 4.1: Inaugural UNU Macau-LPI AI & Future Governance MUN Conference

- **Focus:** Organize a flagship joint MUN conference. Given the project’s core, a highly relevant theme would be “Global Governance of Artificial Intelligence,” allowing the topic, tools, and process to be intrinsically linked.
- **Capacity Building:** Prior to the conference, specialized training sessions on AI literacy, data ethics, the functionalities of the bespoke AI tools used, and the principles of ABM will be offered to all participants.

Initiative 4.2: AI-Driven Synthesis and Reporting of Youth Perspectives

- **Process:** Following the conference, utilize advanced AI tools (e.g., Natural Language Processing for thematic analysis, summarization algorithms) to analyze the rich dataset generated – including draft resolutions, position papers, recorded debate transcripts, and outputs from participatory modeling sessions.
- **Output:** Produce a comprehensive “Youth Perspectives Report on [Conference Theme]”. This report will highlight key insights, innovative policy proposals, areas of consensus, points of divergence, and emergent ideas from the youth delegates.

Initiative 4.3: Strategic Dissemination to UN and Global Policy Arenas

- **Action:** Formally submit the “Youth Perspectives Report,” along with the adopted resolutions from the AI-MUN conference, to relevant UN entities. This would specifically include the Office of the UN Secretary-General’s Envoy on Technology, UNESCO, and other UN agencies and programs whose mandates align with the conference theme.

4. Participant Recognition and Continued Engagement

Certification: All participants will receive a certificate for attending the MUN conference, along with a separate one recognizing their participation in the UNU-LPI research project. Students who join the design, testing, and improvement of AI models may also receive an additional certificate highlighting their contributions in developing UN AI models.