unicef

STUDY GUIDE

Artificial Intelligence and Children Welfare

Examine the ethical and legal considerations of AI in child welfare, including education, healthcare, and protection

St PETER'S SCHOOL
Barcelona

SMUN 2030

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1. Welcome Letter

Dear delegates,

It is an honor to welcome you to the UNICEF committee at the Singularity Model United Nations. During the next few days, you will be discussing Children's Welfare in the era of Artificial Intelligence.

Nowadays, technology, and especially Artificial Intelligence, has transformed how we live, communicate, and work. However, this type of change has also been demonstrated to present challenges in the protection and welfare of children. It is our duty to board these topics in a sensible, comprehensive and responsible manner. It is essential to bear in mind the international and local protection of basic children's rights such as education, healthcare, or protection.

While this study guide provides a starting point and framework for the conference, it would be your further research and contributions that will enrich the debate and challenge your fellow delegates to engage in critical reflection. For the next few days, you will have the opportunity to debate and collaborate on innovative proposals that can guarantee a safe environment for children. We encourage you to do deep research and to be actively involved in the debate, to use the space to exchange ideas, to discuss different perspectives and, mostly, to work on proposals that guarantee the safeguarding of children's rights during the revolution of Artificial Intelligence. Finally, remember that the true value of this experience is not only acquiring knowledge, hence do not forget to enjoy what this experience would offer to you.

We are looking forward to hearing your brilliant contributions and solutions. We wish you an incredible and fruitful experience during S'MUN.

Sincerely yours,

Stefani Haces Gironès

Tengyi Zhang

2. About UNICEF

Originally known as The United Nations International Children's Emergency Fund (UNICEF) - today just United Nations Children's Fund but still the same acronym - was established in 1946 by the UN General Assembly as a response to the consequences of World War II and it became a permanent part of the United Nations System in 1953. UNICEF's original goals were to help children and protect their futures and rights, non matter the position their countries played in the war. Today, UNICEF works in more than 190 countries and has become one of the main organizations on the protection of children's rights and their well-being. Even though resolutions in the committee are not legally binding, they have an important influence on the international community and decision makers. UNICEF depends on funds and voluntary donations to distribute its work raised by local and independent non-governmental organisations.

The line of action of UNICEF is mainly divided in six scopes:

- **Child protection and inclusion:** work to promote policies and expand access to services that guarantee the protection of children all around the globe.
- **Education:** Guarantee access to quality education for every boy and girl in the world, making an emphasis on those that are more vulnerable.
- **Social policy**: reduce child poverty and protect the infancy from the lifelong consequences of poverty.
- **UNICEF in emergency:** work to reach children in emergencies and provide them and their families with lifesaving assistance.
- **Gender**: empower girls and women to ensure and promote their participation in political, social, and economic systems.
- **Research, evidence, and analysis:** through data, evidence, and analysis promote global programmes and initiatives.

3. Key Words

Global Child Welfare: Services and intuitions concerned of overall physical, social, and psychological well-being of children around the world; specially, children in vulnerable situations. (Britannica, 2023).

Disruptive technologies: New technologies that completely change the way things are done. (Cambridge Dictionary, n.d.).

Artificial intelligence: Theory and development of computer systems able to perform tasks

normally requiring human intelligence and skills. (Oxford, n.d.).

Data Security: protection of digital information from unauthorized access, corruption or theft throughout its entire lifecycle (IBM, n.d.).

Data Governance: Series of arrangements that include technical, policy, regulatory or institutional provisions, that affect data and their cycle across policy domains and organizational and national borders. (OECD, n.d.).

4. Introduction

4.1 Historical context of Children Welfare

In the backdrop of the industrialization revolution dated between 1870 and 1914, a rise of child work, abuse and exploitation was faced. As a result, during the middle of the 20th century, the concerns and recognition of social injustices gave birth to the analysis of children welfare. From that moment on, the understanding of children's needs along with the establishment of protective and intervention programs marked the beginning of an approach to the issues that this field may face. Throughout the end of the 20th century and the 21th century, child welfare practices and policies have evolved in response to changes in societal norms. In consequence, international legal frameworks and institutions were created, the flagships of which being the Convention on the Rights of the Child and the creation of UNICEF. Through these frameworks both, consciousness and action to protect children's rights has increased through the years.

4.2 Origins of Artificial Intelligence

During the 20th century, in parallel to the evolution of children welfare, the idea of artificially intelligent robots surged in popularity thanks to science fiction books and movies. But it was not until the 1950s where the term "artificial intelligence" was assimilated by scientists, mathematicians, and philosophers. Hence, a generation of thinkers like Alan Turning and John McCarthy laid the groundwork for this field of study. Followed by this, also in 1950 the first neural network computer was developed in Harvard. Consequently in 1956 during the John McCarthy conference "Dartmouth Summer Research Project on Artificial Intelligence" researchers presented some objectives and the vision of AI. This act is considered by some historians as the birth of Artificial Intelligence.

Early AI research focused on expert systems and symbolic reasoning, but over the years, technological advancements have led to the development of machine learning, neural networks, and deep learning techniques. These advancements have introduced us to an AI-transformative era, which is reshaping societal norms, industries, and will continuously push the boundaries of what machines are capable of.

Artificial Intelligence evolution leads to different types and classifications of it. The IBM

(2023), proposes two types of classification based on capabilities and based on functionalities. The latter division introduces Reactive Machine AI, Limited Memory AI, Theory of Mind AI, and Self-Aware AI. Reactive Machine AI is understood as systems without memory and expected to do specific tasks, such as Deep Blue, a system which is expected to understand and analyze chess rules and possible movements to give the best results in a game. Contrary to this, Limited Memory AI monitors specific situations over time recalling past events and outcomes, as an example we can find generative AI such as ChatGPT. Moving on, the next two types are only theoretical since they have not been developed yet. Theory of Mind makes reference to an AI that would be able to understand thoughts and emotions of others. More complex than Theory of Mind AI, Self-Aware AI would understand its own conditions, needs and beliefs.

The former classification establishes Artificial Narrow AI, General AI, and Super AI. Artificial Narrow AI also known as Weak AI, is the one that we have access to today, and it's trained to execute specific tasks quicker and better than a human mind. Contrary to this, General AI or Strong AI would be able to accomplish new tasks in distinct contexts, without the need of underlying models. Finally, Super AI or artificial superintelligence if released is expected to possess its own cognitive abilities, needs and desires.

4.3 AI Expansion and Child Welfare Concerns

As Artificial Intelligences keep developing, conversation and concerns of their ethical dimension grows. The considerations in the matter have delved into multifaceted situations such as bias, privacy, inequalities and the wider social impact AI may have. The concern about the way AI can affect child welfare has become evident in discussions about bias and fairness. There has been a growing awareness of bias in AI algorithms that can exacerbate and reinforce social inequalities. Another important consideration has become the protection of data and acceptance of terms, being children vulnerable to the damage of technology. And even though artificial intelligence can be used to infringe the rights and welfare of children, it has also demonstrated benefits.

AI has demonstrated that it can revolutionize child protection through analytics and predictions of children at risk. It can also support social workers, providing successful databases reducing risks of mistakes. Moreover, AI can expand access to social services by bridging geographical and linguistic barriers. In terms of development, AI can provide personalized educational platforms promoting academic success and development.

In these lines, we can state that AI has demonstrated to hold a great potential to transform child welfare; however, it is paramount to understand that it requires a careful, ethical, and legal approach regarding its implementation.

4.4 Historical international conventions and policy guides

- UNICEF's policy guidance on AI for children (2021) to promote children's rights in all sectors, policies and practices, it also offers nine requirements for child-centered AI.
- The European Commission's Joint Research Centre's guidance, 'Artificial Intelligence and the Rights of the Child' (2022) that introduces a set of policy directions for children rights and artificial intelligence.
- The World Economic Forum's Artificial Intelligence for Children Toolkit (2022) that seeks to equip companies with tools to create responsible AI for children and young users.
- The IEEE Standards Association's Age-Appropriate Digital Services Framework (2021) that sets processes that organizations must follow to make their services age appropriate.
- The UN Human Rights Council's Report on Privacy's report on the right to privacy in the digital age (2021) that exposes AI's potential for privacy interference, illustrating its impact on four key sectors: Artificial intelligence in law enforcement, artificial intelligence systems and public services, use of artificial intelligence in the employment context, and artificial intelligence for managing information online.

5. Current situation

As already mentioned, UNICEF mandate is to protect the rights of every child, therefore as AI is impacting children in many different ways UNICEF has the duty to understand and recognize this relation and its crucial role in negotiating the security of children in the AI age. As children are born with access to this technology the impact in their lives is getting bigger, bringing new benefits and risks to their development.

5.1 Benefits of Artificial Intelligence

The evolution of Artificial Intelligence has demonstrated its potential in improving children's welfare. UNICEF, along with the World Economic Forum, has identified two main areas in which this potential lies: adaptable AI and big data insights.

Adaptable AI

As Artificial Intelligence adapts, it has shown to create personalized tools and services that adjust to individual needs and preferences. This way we can find the creation of personalized learning tools that can facilitate access and improve educational outcomes for children worldwide. Similarly, AI has demonstrated to improve both physical and mental

health of children. This technology can bring better quality life to disabled people through different mechanisms that adapt to their necessities, for example the translation of written to spoken word for a blind children. On the other hand, AI driven bots have been used to extend access to mental health for those that have limited access to therapists. Adaptable AI, then, has demonstrated to maximize potential and give every child a better chance to reach their full potential.

Big data insights

Accompanied by Big Data, Artificial Intelligence analytical prowess has unlocked powerful insights that have revolutionized children's health and well-being. In the first term, AI has released new ways to gather data and process it. Secondly, this technology has helped to have a better understanding of patterns and assess people's needs. UNICEF, with the help of both Big Data and AI has developed different mechanisms to help in emergency situations and humanitarian programs.

A project that has demonstrated the benefits of mixing both technologies is being developed in Iraq, where UNICEF and the government along with a telecommunication company have developed a system to measure poverty in a more exact way than a census. This system uses satellite images, big data taken from moviles to have access to data and then artificial intelligence to analyze the input obtained. This has facilitated the access to information and providal of help to more than 42 million children. Through this we can exemplify how disruptive technologies have allowed a more organized and exact mapping of crises, schooling, and connectivity; which allows better and more planned solutions.

Overall, with the help of Artificial Intelligence, human abilities can be complemented to improve the access to information and allow better and more effective solutions that put at risk the welfare of children. Enabling accessibility to AI technology offers systems that refine responses to crisis, educational systems, and access to physical and mental health.

5.2 Risks of Artificial Intelligence

As already explained, the use of Artificial Intelligence has brought an important advance in preventing children's damage and promoting their rights protection. However the bad usage and the development of these technologies also represents some risks to children's welfare.

One major concern is the impact on children's privacy, safety, and security. Artificial Intelligence has demonstrated to collect and analyze vast amounts of data about children, such as their online activity and interactions. This can be used to create detailed profiles that can be misused for targeted discrimination, advertisement, and even vigilance. To guide the close examination of both the benefits and risks of access to children's information through artificial intelligence, UNICEF has distinguished four dimensions of analysis: identity protection, harmful content, location detection and biological safety. Following these lines, the establishment of regulations and ethical frameworks are vital to ensure children's well-being in the age of AI.

Moving on, AI can also exacerbate inequalities in children's welfare. There is a risk that the misuse or lack of standard in the use of artificial intelligence can generate discriminatory outcomes. Machine learning algorithms that decide who gets access to services and its quality can reinforce bias and discrimination if unchecked AI is used. To prevent this new type of discrimination UNICEF has determined the most vulnerable areas, this includes education, health, social welfare systems, and financial systems for families. Hence, we must highlight the importance of carefully examining AI systems in order to identify and eradicate bias, ensuring then that they are used to promote equity and inclusion instead of perpetuating biases. Furthermore, the digital division characterized by disproportions in hardware, connectivity, technological literacy and access creates disadvantages on children from unprivileged backgrounds. The lock out of this children population prevents them from tools that may empower them at the same time that it may create a cycle in which those with advantageous positions can gain the most from AI and solidify nowadays inequalities.

Exploring the complexities of Artificial Intelligence and children's welfare has also revealed an increasing overdependence on AI of students. This dependence may reduce the creativity and critical thinking of children, which leads to the lack of active problem-solvers, replacing them with passive information absorbers. Moreover, the lack of emotional intelligence has raised concerns on the impact on social and emotional well-being and the psychological and cognitive consequences this may generate to kids in oncoming generations.

6. Bloc positions

Cambridge defines a bloc as "a group of countries or people that have similar political interests". Even if the topic treats an issue that has a global impact, certain countries may experience the emergence of Artificial Intelligence and the impact on children's rights differently. As a result, when forming blocs, delegates must consider certain aspects that would build a strong and realistic coalition with other delegations.

When forming positions, bear in mind already existing regional cooperation. For instance, the EU-LAC Alliance for AI among the European Union members and countries Latin America and the Caribbean (Argentina, The Bahamas, Barbados, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, and Uruguay). Moreover, we can find other regional accords like the Smart Africa alliance in AI, that includes the member states of the African Union or the Association of Southeast Asian Nations (ASEAN)'s efforts on Artificial Intelligence governance.

Besides the regional alliances, delegates can also form blocs based on common situations and interests like the investment on artificial intelligence, the impacts, the accessibility, or the effects on its population. As an example, we can refer to the recent agreement signed by the United States, Great Britain, Germany, Italy, the Czech Republic, Estonia, Poland, Australia, Chile, Israel, Nigeria and Singapore. Under the terms of this agreement

signatories are mainly interested in appropriate security testing when developing new Artificial Intelligence technologies. In order words, they seek to protect consumers from hackers and other cybercriminals.

We encourage you to listen actively to other proposals in order to arrive at the bloc that best fits your country's position or interests.

7. Guiding questions

- What measures should be taken in order to safeguard children's data privacy and security when employing AI?
- How can the ethical and responsible use of AI in child welfare practices be ensured? How can we prevent Artificial Intelligence from perpetuating and accentuating children's inequalities?
- Which steps should be taken to ensure that worldwide professionals and childhood experts are equipped with skills and knowledge to give an effective and non-biased use to AI tools?
- How can we ensure that AI systems do not perpetuate or exacerbate existing biases against certain groups of children? Which measures can be implemented to detect and mitigate bias in AI systems?
- What regulatory frameworks or international guidelines should be discussed to ensure responsible and standardized use of AI in child welfare across different countries and regions?
- How can AI developers ensure that their systems are safe and responsible, and what role do security committees play in this process?

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