

AI AND CHILDREN:

AI guide for parents

November 2021 UNICEF Office of Global Insight and Policy

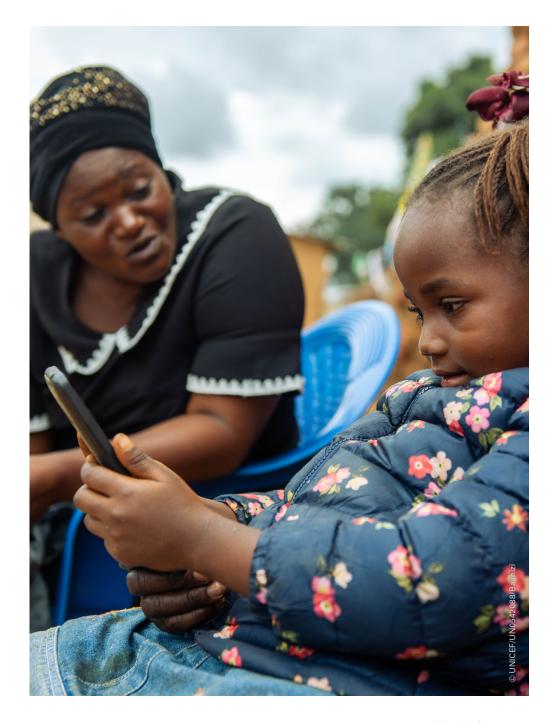
What is Artificial Intelligence?

Artificial intelligence (AI) technology refers to computers or machines that are programmed to perform tasks that we traditionally think only humans can do – by mimicking human thought or behaviour. This technology is used to make predictions (e.g. how a virus may spread), recommendations (e.g. what online videos to watch next), or decisions (e.g. how an essay should be graded).

Al technologies are already present in your lives and those of your children. For instance, your mortgage request, your child's college application, medical diagnostics, and movie recommendations may all be powered with the help of Al systems.

Al systems can be trained to make predictions and programmed to make decisions, sometimes without any human involvement. This is done through data analysis and pattern identification. Data is collected by our online activities, or by using sensors (e.g. cameras, thermometers, microphones, motion sensors, etc.) to observe the environment.

The algorithms (or instructions) used by computers to analyse this data can be very complex, and therefore decisions made by Al systems are sometimes surprising, unexpected or unexplainable. This is not an acceptable outcome when decisions are being made about people.



Opportunities and risks

Smart robots can be used to perform simple repetitive tasks to make our lives easier and even perform dangerous tasks in environments that are hazardous to people. However, they could replace some humans in the workplace, impacting future job prospects for children and the kind of skills they need to develop.

Applications of AI in education and health care can contribute to better learning outcomes, health and well-being. However, we need regulations and safeguards that ensure that AI systems are reliable, safe and trustworthy.

Al systems can help us make better decisions and address complex problems, such as climate change and epidemics, but Al could also deepen power and wealth imbalances (e.g. not everyone has the ability to develop and utilize Al systems).

Given Al's potential to reshape the 21st century, we all need to be aware of the possible negative outcomes so that we act now and leverage Al technologies for good.

Risks include:



Bias

Bias occurs when an AI system produces results that are systemically prejudiced, due to assumptions made during the development process, prejudices in the training data or design errors. Such negative bias can limit opportunities for certain vulnerable groups, including children.



Safety

Safety risks may occur when AI systems are poorly designed or regulated, misused or hacked. This includes privacy violations and loss of control over autonomous systems – such as driverless cars. In these cases, children's physical safety and data can be at risk.



Profiling and deception

Al-driven recommendations for news stories, online community groups, friends and more are based on profiling – they feed people content based on their preferences, creating thought <u>filter bubbles</u>. Al can also be used to amplify <u>disinformation</u> and bias, endangering children's ability to develop and to express themselves freely.

3

What you can do

Your children are affected by Al-enabled systems, either directly through their digital activities or indirectly through decisions Al systems make about them or you. The following suggestions are designed as a starting point to help you engage and educate yourself and your children on Al systems. See the UNICEF Voices of Youth website or these resources to learn more.



C Explore and reflect

- Learn the basics of AI systems and how these technologies can impact children both positively and negatively. Online courses such as <u>Elements of AI</u> offer useful information to help you think through what AI is and how it affects society.
- > Think critically about the potential data and privacy impacts of AI systems used in your home, your child's school, and children's toys by considering how and why the collected data is used.

≨≡ Act

- > Teach your children about the opportunities and risks of Al systems, including data ownership and the importance of not sharing more data than they want or need to.
- > Ask your children's school how they are using Al technologies and how they are choosing which applications to use.
- > Find out which local organizations are advocating for the responsible use of AI and see how you can be involved.

4

Office of Global Insight and Policy United Nations Children's Fund 3 United Nations Plaza, New York, NY, 10017, USA

© United Nations Children's Fund (UNICEF) November 2021