Empowering and Engaging Young People:
The Evolving Role of Science and Technology
17 April, 3 p.m. – 4.30 p.m.

IDENTIFICATION	
Session/plenary title	Empowering and Engaging Young People: The Evolving Role of Science and Technology
Session/plenary focus (SDG, region or topic)	Emerging technologies, education, global challenges (poverty, humanitarian crisis, climate change), bridging the digital divide, technology as an enabler to all SDGs
Session/plenary UN co-lead UN 1	International Telecommunication Union (ITU)
Session/plenary youth co-lead 1	SPI Youth Platform
Session/plenary UN co-organizers	UNCTAD
	UNEP
	UNESCO
	UN-Habitat
	UN Foundation
Session/plenary Youth co-organizers	Youth for Privacy Student Platform for Engineering Education and Development

BACKGROUND

Empowering and Engaging Young People: The Evolving Role of Science and Technology
Science and technology are key to solving the world's most pressing challenges. 5.5 billion people, or 68% of the world's population, are now using the internet. This widespread connectivity is driving a wave of rapid technological advancements in areas like artificial intelligence (AI), space technologies, quantum computing, the Internet of Things (IoT), and more.

The digital age offers unprecedented opportunities with almost 80 % of young people in the age group of 15-24 years old globally use the Internet. However, there are also challenges. The digital divide remains, with only 43% of young people aged 15-24 in low-income countries having access to the internet, compared to 99% in high-income countries. Ensuring that youth can fully benefit

from these technologies requires access to affordable and appropriate digital tools, along with reliable internet infrastructure. At the same time, access to technology must be accompanied by the skills to navigate online information with resilience and critical thinking. With that in mind, the digital empowerment of youth is key to ensuring they can participate meaningfully in the digital world, make informed decisions, protect themselves from misinformation and online risks, and leverage technology for personal growth, education, and social impact.

Technology, especially AI, is creating new job opportunities for young people. To fully seize these opportunities, youth must develop the necessary digital skills required to succeed in today's workforce. The growing demand for digital content, especially video, highlights the need for reliable, trustworthy data in an increasingly digital world. With "data" at the core of emerging technologies, it is crucial for young people to be equipped with the skills and knowledge to navigate this fast-evolving tech landscape. However, challenges such as cybersecurity risks, energy efficiency, privacy concerns, the rise of disinformation and the ethical use of AI and data need to be addressed. Raising awareness of these issues among youth is critical to ensuring that youth can responsibly engage with these technologies.

Emerging technologies also offer tremendous potential for entrepreneurship, enabling young people to innovate and create innovative business models that address critical social and economic issues. However, in addition to building business skills, young entrepreneurs require access to technology, funding, and a supportive ecosystem to stay competitive in the startup landscape. Collaboration between governments, universities and the private sector can be crucial in providing the resources and expertise, as well as supportive policies, to channel the efforts of young innovators to address various community challenges. Technology and science is not just a tool for development; it is an essential enabler that spans across all 17 Sustainable Development Goals (SDGs), serving as the backbone for global progress. Every single SDG—whether addressing poverty, hunger, health, education, gender equality, clean water, or climate action—is deeply connected with technological innovation and its application.

The technology is advancing rapidly, and there is a need to adapt to new technologies while also preparing and educating current and future generations. In 2024, the Summit of the Future recognized the crucial role of youth participation in the digital agenda. Member States adopted a Pact for the Future that included a Global Digital Compact and a Declaration on Future Generations. The Pact of the Future also mobilized Member States to "*design and roll out digital media and information literacy curricula to ensure that all users have the skills and knowledge to safely and critically interact with content and with information providers*".

OBJECTIVES OF SESSION/PLENARY

- Educate the younger generation about the pros and cons of emerging technologies.
- Emphasize the role of media and information literacy to enable young people's ability to engage critically with information, and to navigate the online environment safely and responsibly.

- Raise awareness of models that could empower the younger generation to adapt to the evolving needs of emerging technologies (involving universities, governments, and other stakeholders).
- Emphasize best practices around digital empowerment of youth that can be easily replicated.
- Highlight how emerging technologies can be leveraged to address the most pressing global challenges, such as poverty, humanitarian crises, and climate change.
- Emphasize the need for skills development and lifelong learning in the digital age
- Promote inclusion and equitable access to technologies
- Emphasize the cross-cutting role of technology as an enabler

OVERALL FORMAT/STRUCTURE

1. Opening & Welcome (10 minutes)
- **Moderator's Introduction:**
  - Briefly introduce the session's theme, objectives, and relevance.
  - Emphasize the synergies and shared objectives outlined in the selected topics, while leaving room for further discussion moving forward.
  - Share the results of online consultation with young people (if it is ready)

2. Panel Discussion (20 minutes)
- **Theme: Emerging technologies: opportunities and challenges**
- **Panellists:**
  - Representatives from academia, industry and youth organizations.
  - A diverse group, including young innovators, students, policymakers, and tech leaders.

Discussion Topics:
- **Bridging the Digital Divide:** Addressing disparities in internet access and digital literacy.
- **Education for the Future:** How to prepare youth with AI, quantum, space tech and other emerging tech skills
- **Ethical and Responsible Tech Use:** Addressing privacy, security, misinformation, and ethical concerns of AI and other emerging tech. Why is it important to know about these issues for young people?
- **Youth-Led critical solutions:** Showcasing examples of young people addressing critical challenges through science and technology.
- Youth involvement in digital solutions: Examine the ways in which young people are engaging with various digital transitions and solutions.
- **Government Initiatives:** Highlighting government initiatives focused on empowering and engaging young people with tech and related policies.

Mr. Alexander Schrier, student at the University of Pennsylvania, US

1. Ensuring that youth can fully benefit from emerging technologies requires access to affordable and appropriate digital tools, as well as reliable internet infrastructure. At the same time, access to technology must be accompanied by the necessary skills to

navigate the digital world. Education plays a critical role in this. As a current research fellow at the University of Pennsylvania, could you share your perspective on how universities can help better prepare young people for the future of technology?

2. We also understand that your team is working on a capstone research project for ITU, focusing on AI and energy efficiency. Why did you choose this topic, and why do you think it is important to address this issue? Is there something you believe other young people should keep in mind when using AI, particularly from an energy sustainability perspective?

Ms. Jayati Das, International Consultant, Youth 2030 Cities, UN Habitat; Advocacy lead - Healthy Cities for Adolescents, Ecorys UK

1. In what ways can youth be meaningfully included as partners within a rapidly evolving digital ecosystem and how can technology serve as a key enabler in addressing the most pressing global challenges, such as poverty, humanitarian crises, and climate change? (provide info on example of solutions)

2. How can vulnerable youth—especially in low-income countries—have access to connectivity, and digital tools for education, information sharing, and community building? Please provide examples.

Ms. Zino Haro, Co-founder of Youth for Privacy, Mexico

1. What does digital literacy mean to you? As we navigate the digital world, what kinds of skills do you think young people need? What should they be aware of today? And what suggestions would you offer to help young people navigate an AI-driven world?

2. How can we raise awareness and empower the younger generation to adapt to the evolving needs of emerging technologies? (you could also raise about challenges). Which current models exist as best practices and could be replicated? (gov initiatives)

3. Interactive Segment Youth Lead (40 minutes)
- Member States and other young representatives take floor to share their experience on how they empower young people in science and technology with concrete examples

4. Call to Action & Closing Remarks (5 minutes)
- **Key Takeaways:**
- Summary of the main discussion points.
- **Final Remarks by Moderator:**
- Emphasizing the importance of continued youth participation in shaping the digital future and highlight the collaboration of working together with all UN agencies

DISCUSSION QUESTIONS

1. What are the most important digital skills that young people should develop to thrive in the evolving job market, particularly in the tech-driven economy?
2. What role can partnerships with universities, governments, and the private sector play in driving youth-led innovation?
3. How can business incubators, knowledge hubs, and science parks be leveraged to create inclusive opportunities for young innovators?
4. How can young people be better prepared to navigate the ethical challenges of AI, data privacy, and online security?
5. How can Youth Organizations be mobilized to empower young people in the digital age?
6. What best practices exist for engaging marginalized youth in digital literacy programs?

NAMES AND TITLES OF SESSION SPEAKERS AND MODERATOR(S)

Moderator: Ms. Sinead Bovell, the Founder of Waye

1. Mr. Alexander Schrier, student at the University of Pennsylvania, Student Fellow at Perry World House US
2. Ms Jayati Das, International Consultant, Youth 2030 Cities, UN Habitat; Advocacy lead - Healthy Cities for Adolescents, Ecorys UK
3. Ms Zino Haro, Co-founder of Youth for Privacy, Mexico

Interactive Segment
Member States and youth representatives

Youth respondents:
- Mr. Gunraagh Singh Talwar, Mr. Gunraagh Singh Talwar, UN Foundation Next Generation India Fellow and Founder, Dumpcrete
- Mr Federico Perez, Founder and CEO of Selvitas and member of UNCTAD Youth Network
- Mr.Yash Tadimalla, Ph.D Candidate, Center for Humane AI studies, SPI Focal point
- Ms. Ishwarya Kandasamy, YOUNGO's Ocean's Voice working group

OVERVIEW OF PREPARATORY EVENT/CONSULTATION

This questionnaire is part of the ECOSOC Youth Forum session on "Empowering and Engaging Young People: The Evolving Role of Science and Technology." The questionnaire is designed to gather youth perspectives on the challenges and opportunities faced in the digital world.

As emerging technologies reshape economies, education, and civic engagement, understanding young people's experiences, priorities, and aspirations is critical. This session will explore how

youth can be better equipped—through skills, support, and ethical guidance—to harness digital tools for social impact and sustainable development. The input from young people will directly inform the dialogue and help ensure that youth-led solutions and voices are central to global digital transformation efforts.

https://forms.office.com/e/6VfHTCvwH8