On Digitalization and Sustainability

An interview with Susanne Burger,
Head of the Department for European and International Cooperation at the Federal Ministry of Education and Research, in the context of the ICB "Digitainable Thinkathon" on April 28, 2020

1. The German Federal Ministry of Education and Research has recently launched a strategic Action Plan “Natürlich.Digital.Nachhaltig” (Natural.Digital.Sustainable) for a sustainable use of digitalization. What are the main fields of action identified by BMBF?

The action plan outlines three main areas of action: The first focuses on establishing the foundations for digital sustainability. We support good education which promotes the development of competences enabling people to make sustainable decisions in a digital world. In addition, the action plan provides funding for fundamental methodological research and digital data infrastructures that are crucial to using data for sustainable innovations.

The second focus is the growing demand for electric power and natural resources that is caused by digital applications and infrastructures. We want and need to make digitalization itself more sustainable.

Thirdly, we want to develop and deploy digital technologies and methods specifically designed to achieve the UN Sustainable Development Goals, e.g. for the fight against climate change and the preservation of biodiversity.

2. What are the main opportunities and challenges in education for a sustainable digital future, from school to university?

The new UNESCO “Education for Sustainable Development for 2030” Programme (ESD) will focus on the question of how to combine ESD and digitalization. On the international level, Germany is playing a pioneering role in ESD. In our opinion, an important challenge will be to equip people with the relevant competences to make sustainable decisions in a digital world, but also to design the further process of our digital development in a sustainable way.

Digital media have a lot to offer in education, including the possibility to reach all learners - young children, pupils, university students and beyond - and to provide suitable offers for everyone. They also enable new forms of training and exchange, including cooperation with actors and students all over the world. We should make sure that these possibilities are used sufficiently in the education system and for lifelong learning and that they lead to more sustainability in our society as a whole.
3. Given the omnipresence of the digitalization discourse today, it seems almost incredible that it doesn’t figure more prominently in the UN Agenda 2030 with its Sustainable Development Goals, which has been launched less than five years ago. Could the digitalization discourse fade away as quickly as it rose and be superseded by the next blockbuster within another five years? Or, if not, why not?

Digitalization is not a sustainable development goal itself, but it contributes to the achievement of every single one. The digitalization discourse in the sustainability community is quite vital. The UN Global Pulse initiative promotes big data and artificial intelligence to support the SDGs. The aim of the UN “AI for Good” initiative is to deploy AI to solve global challenges. These are outstanding initiatives and platforms which combine digitalization and sustainability in order to have mutual knowledge gains. Both digitalization and sustainability are long-term trends that will remain present in the years to come. Nevertheless, new topics might arise that are as important for sustainable development as digitalization. The sustainable development agenda should remain flexible and react to such potential new trends.

4. Although it may be too early to ask the question – what might be the lessons learnt from the Corona crisis in terms of digitalization and sustainable development?

One key lesson from the corona crisis is that our society and economy are vulnerable to unforeseen challenges because we rely on complex, interdependent social and economic processes. So one challenge in the wake of the corona crisis will be to make our society more resilient and crisis-proof. Because the sustainability community also aims for resilience, e.g. in the context of climate change, there could be synergies between post-corona action and sustainability action. Digitalization can be the key enabler in this regard. The coronavirus pandemic shows that quick adaptations in economic and social processes are possible when broad-ranging access to digital tools and infrastructure is available.