Can technology shape students' character?

By Alpha Amirraechman

Director of Southeast Asian Ministry of Education Consultant, Regional Open Learning Center and lecturer at the School of Education, University of Sultan Ageng Tirtayasa, Serang, Banten

The new education and culture minister, Na-dien Makarim, said that competency and character were two of the most important aspects of education. The Cabinet's youngest minister, who led Gojek from a delivery car center consisting of 15,000 motorcycle taxi drivers to a $14 billion company with 10 million users in Southeast Asia, said the education system should be significantly enhanced with the use of technology, which is indeed beginning to take hold in this 4.0 era. President Joko "Jokowi" Widodo is known for his commitment to digital literacy and education, and the country has made significant strides in this area.

There is no question that technology shapes students' competency — computer-assisted coding to teach basic to advanced logic, for example. But the pressing question is: can technology help shape students' character? Perhaps it can, but it can also undermine self-control, honesty, respect and fairness — which contribute to good character — technologically and effectively delivered through technology?

Nadiem's awareness about the issue of character building is the very heart of education, a good sign that he is at the correct starting point in his ministership. Adults used to be the filter through which children were exposed to proper values. But now, with mobile gadgets in most children's hands, that role is largely absent. Children are increasingly outside the reach of adult influence. For example, open and distance learning, which are now mostly online, are part of the digital learning management system and massive open online courses, enable students to learn at any time, anywhere, without the physical presence of instructors or teachers.

Besides Universitas Terbuka, a university that has provided full open and distance education since its establishment in 2004, other regular higher education institutions have been pushed by the government to introduce open educational resources, in the form of blended learning, which combines offline and online courses. Basic and secondary education institutions have also been encouraged to adopt this system to add value to education and reach the previously unreachable.

In every province there is at least one "hub" school, which acts as a provider of open and distance education for children who have difficulty attending school.

Many other countries such as the United States, China and India, where technology-based open and distance education has earned trust both in the public and private sectors, with students scattered all over the world, making them citizens of an almost unlimited global digital village, Indonesia still has a long way to go.

Despite the push for the use of technology, monotonous teaching is still business as usual. And for most, technology-based education has still not been fully developed, not only due to the lack of infrastructure but also because of the willingness to depart from the current comfort zone and scepticism about the effectiveness of the pedagogical use of technology.

For example, one educator cast doubt on the ability of technology-based distance education to really help shape students' characters. The practical absence of adults and the limited physical interaction for students to interact with each other have raised doubts about whether proper character education is really possible through technology.

Therefore, the current virtual coordination training program, which trains teachers in digital literacy awareness, is instrumental to opening up teachers' perspectives and should be continued with the ministry's full support and more extensive teacher involvement.

How about necessary skills for students?

US-based Center for Media Literacy chief executive officer Tes sa Jools has proposed that what she calls "process skills" of knowledge acquisition, problem solving and citizenship for students to be able to "benefit from technology, to manage the risks they encounter, and to make responsible choices on a lifelong basis".

Hence, the 21st century skills of 4C — communication, collaboration, critical thinking and creativity — should also consist of citizenship and self-direction skills since students are part of a global village with certain norms and regulations and will interact and collaborate with their peers in other parts of the world.

These process skills, which are deeply grounded in values and character, should be designed in a way that allows students to acquire them through blended or even full online learning.

For example, certain community projects, which promote the values of diversity, can be conducted with the use of empowerment-oriented online platforms.

The use of communication technologies can also help marginalized and disadvantaged young people to develop their identities and learn life skills.

The challenge is to gather the very best of our digital talent — education experts, practitioners and policymakers — to sit together and design and implement a sustainable technology-based education system that is characterized by digital literacy.

In other words, innovation with the use of technology and its continuous creative integration into pedagogy, including character development, is a prerequisite for the Education and Culture Ministry to take the giant leap of redefining an entire fresh look at Indonesia's education ecosystem.

Another challenge for Nadiem will be confronting the fact that technology's potential — left unmonitored and unregulated — is almost unworkable within the current rigid government budget regime, where too strict financial allocation mechanisms mean law makers have to constantly navigate a labyrinth of potential legal consequences.

The Finance Ministry needs to ease its financial regulation to give more space and flexibility to other ministries, particularly the Education and Culture Ministry, to use their budget allocation in a way that adapts to emerging changes and new innovations and adjusts policy accordingly while adhering to principles of accountability.

The growing threat of water wars

By Jagati Ghosh

Project Syndicate, New Delhi

Professor of economics at Jawaharlal Nehru University in New Delhi, executive secretary of International Development Economics Associates and a member of the Independent Panel for the Reform of International Corporate Taxation

The dangers of environmental pollution receive a lot of attention nowadays, particularly in the developing world, and with good reason. Air quality indices are dismal and worsening in many places, with India, in particular, facing an acute public health emergency. But as serious as the pollution is, the threat of water wars poses an even greater danger.

And cross-border conflicts are just the beginning. Water-related tensions in the least-developed countries — which is particularly vulnerable to water scarcity due to climate change — need urgent attention.

Meanwhile, the advanced economies not only avoid many of the consequences of water stress (at least for now) but also maintain the lifestyle excesses that have propelled climate change

Jack Ma is ripping up $12 trillion stock market

By Shuli Ren

Bloomberg Opinion

Bloomberg Opinion columnist covering Asian markets. She previously wrote on markets for Barron's, following a career as an investment banker, and is a CPA charterholder.

Jack Ma is riding high this week. Alibaba Group Holding Ltd., the company he founded, has won approval to acquire the fintech unit of electronics group Co. quickly followed suit. Investors were already looking at Monday's stellar statistics of the Digital Economy.

A new study by Australia's Ministry of Education, which has previously surveyed the digital literacy of 2,000 students aged between 8 and 15 in August and found that 44 percent of the children wanted to be able to access the photos their parents posted, while 7 percent wanted to ban their parents from posting images of themselves.

Cybersecurity expert Afton Tanjaya from computer security firm Viasilkom, has cited the risk of identity theft, where scammers steal and misuse children's photos found on social media. Big data technology has made it possible to process a collection of someone's photos from various angles into a new face recognition database, which can be used by scammers to infiltrate secured systems.

According to Forbes, thousands of parents have not been educated properly about the potential danger of oversharing material related to their children.

A survey by the Pew Research Center on American teens has found that apart from cyberbullying, which is now lightning up and spreading rumors — children feel pressure to perform and appear perfect for their parents' online posts.

Child psychologist Amanda Margarita Agustarino has called on parents to reconsider sharing their children's pictures on social media. She said it was important for parents to ask themselves whether they were sharing the pictures online for the benefit of their children or for themselves.

Let's remind the parents among us to be wise in using social media, especially in protecting the privacy of their children. After all, we want what's best for children — to let them live happy lives.