## Futures Literacy and the Reframing of Education in Asia and Beyond

## **An Introductory Tale:**

Let us start with a friendly Tale. A personal dilemma arrived at my doorsteps the other day. Should I compel my students to switch on their cameras when learning online? The argument "in favour" is that the "switch-on" enables the teacher to check for class participation and to have some eye contact which is a valuable part of education and socialization. The argument "against" is that some of the students are in precarious and difficult situations. They might not own a computer or are forced to share a computer due to lack of money to buy a machine. Or they might be in a location where they are too timid to show the view behind the camera which could expose too much of the privacy which they need to safeguard. So what is the solution, please?

After discussing this puzzle with several people, I opted for a compromise. "Dear Students, please switch on the camera unless you have a good reason for the "switch-off". And please provide a reason for the camera "switch-off"."

Flexibility, rationality, empathy and necessity interlinked with education and socialization somehow blended to find a pathway together as part of our pedagogical process and the all-rounded literacy to which we aspire, with the future pending and impending.....among all of us.

The term "Futures Literacy" thus offers the opportunity to reframe the panorama of Education, especially because Covid-19 has accelerated our process of adaptation. This is especially important for the Asian region, because it is the most populous continent, blessed with a huge number of children but also ironically replete with a variety of political systems, ranging from democratic to authoritarian. There are also key lessons for the world beyond.

Online education, whether singular and or hybrid, has become the norm in many settings, despite the acute paradoxes faced by humanity, particularly our children, along the way. Some have access to online, while others do not. Some have the

means to buy new technology befitting online education, while others do not. Old disparities are compounded by new anomalies, with age-old poverty aggravated by the advent of technological deficit and related lack of access.

Yet, the point of underlining the basic ingredients of education is to enable ourselves as humans to develop with a longitudinal perspective — call it the "anthropological challenge". Meanwhile, there is the interface between our existence and the surrounding environment with a capacity to be risk-conscious and risk-ready, testing our survival to the limit — call it the "ontological challenge". In reality, we should not forget that there are already some instruments in the existing educational toolbox which can be well-used, while we also need to prepare for and respond to innovations and drivers of change in the (perhaps brave?) new world. Let us then cast a glance at the reflections from the two-sided mirror: side one: futuristically existential, and side two: existentially futuristic.

## **Futuristically Existential:**

There are key considerations which are at the heart of humanity's existence and survival, inviting us to address the stakes with a sense of preparedness for the future, maximizing various existing entry points.

1) Learning and doing. The old maxim "Learning by doing" voiced by UNESCO years ago is still relevant today in our interaction with emerging futures. It is still true that "schooling" is not equivalent to learning. Even with the flood of information on the internet, the role of the teacher is still relevant but it should be less as a magisterial lecturer and it should be more as a coach to enable students to critically analyse a variety of information. We need to be aware of the adage that "information is not necessarily education" and "propaganda is certainly not education".

Even though the pandemic has made field visits and field work more difficult, access to life situations is still important to enable students to learn from real situations and to appreciate the wisdom of the many catalysts along the way. Hence, experiential learning. Cross-disciplinary, cross-cultural and inter-disciplinary knowledge and learning are to be nurtured, bearing in mind that there should always be room for the Social

Sciences as a complement to the Technological Stream, as they are critical for a sense of consciousness and conscience about human interaction and the self-actualization of humans with a grasp of history.

For example, it should not pass unnoticed that this past month witnessed a key resolution of the UN General Assembly underlining the need to educate people about the Holocaust whereby some six millions Jews and other vulnerable groups, such as minorities and LGBTI people, were systematically exterminated by Nazis before and during the Second World War. Thus there is a need to counter Holocaust denial, whereby misinformation and disinformation are regrettably encouraging people to deny that the genocide took place. Moreover, social discourse and social interaction, such as through sports, artistic events, community programmes and *pro bono* work to help marginalized groups are all lessons in socialization that enable the learner to appreciate the basics of life not only materially but also non-materially and spiritually. Life-based and lifelong literacy, please.

2) Including and Participating. This entry point invites us to take stock not only of what is learned but also of how it is learned. There is the complementarity between substance and methodology. There are still many settings today where the methods of teaching and learning are not participatory enough as we prepare for our futures. Democratic space in the so-called classroom, whether offline or online, is an old dilemma when faced with the opacity where and when learners are subjected to indoctrination, without the space and freedom to participate actively in discussions with an open mind. We should not be disingenuous about the many non-democracies in the region where academic freedom is very constrained and educational freedom is heavily strained in such setting.

However, even now, there are already instruments in the educational toolbox which should be well used. The international community's Sustainable Development Goals (SDGs) have enjoyed universal "buy-in" by countries and their goals, targets and indicators set the tone for inclusion and participation. In particular, SDG 4 calls for quality and inclusive

education, with gender sensibility. It emphasizes not only primary education but also pre-school and secondary education. Technical and vocational education is all the more important now to help people learn new technological skills, especially when work opportunities might no longer be linear in the sense of one lifelong job per one person. Thus there is the challenge of adaptability with access to all persons without discrimination under the promise of "Leave no one behind".

3) Caring and Sharing. There are generally three components behind education: the fostering of knowledge, attitude and behaviour of the human person that is responsive to other persons and the environment. COVID-19 has accentuated the call for a sense of humanity linked with that trio behind the educational process which has become all the more needed when faced with deprivation and disparity. Activities that enable students and the general public to care and share are invaluable to offset the damage inflicted by the pandemic.

The pandemic is also an opportunity to revitalize our responsiveness to the broader community and environment around us. One obvious global/local challenge is climate change and the need to mobilize everyone to decarbonize and reduce waste. The world is not short of standards and there are plenty of treaties and action plans, encapsulated by the Paris Accord on climate change which builds upon the International Framework Convention on Climate Change. There is the well-known target to be realized which is to ensure that global temperature/warming does not rise by more than two degrees Celsius and preferably kept below one point five degrees.

Measures are needed not only to mitigate the situation, such as a to phase down/phase out the use of coal and to reduce dependency on oil and gas, but also to adapt to more sustainable practices, such as good town planning to address climate change, and incentivization, such as tax relief, to enable the public to opt for solar energy and other green, renewable energy. The potential to commit to all these measures will depend much on education from a young age that cares for and shares with others,

together with respect for other forms of life on earth and to face the fact that in a sense, the future is already here as an existential challenge for all of us and our survival as a human race. There can be no sustainable future unless there is also a humane face gazing amicably at the panorama around and before us with a space for comprehension, a call to partnership and a commitment to action across the variety of generations with appreciation for responsibility to actuality and posterity.

## **Existentially Futuristic:**

One business leader very recently listed five technological innovations which are up-and-coming. The Internet of Things; applied artificial intelligence (AI) (such as to use AI for repetitive medical procedures); blockchains; the metaverse and robotics. Education has to address the futuristic elements that are now dawning on us and which will appear even more evidently on the horizon very soon, at best propitiously, at worst ominously. Perhaps we can reduce those phenomena to the three A's represented by A for automation, A for Algorithms and A for Artificial Intelligence discussed below. They all invite more responsiveness from the educational sector to ensure that they are at the service of humanity, implying more innovative education-cum-literacy to cater to the advent of futurism:

1) **Automation**. A key consequence of the pandemic has been the shift to automation. The negative side has been rising unemployment and the question of how to revive access to jobs. Yet, machines are taking over the work previously done by humans. A key strategy is to enable the displaced workforce to re-skill and up-skill. In the meantime, there is the exponential growth of the digital economy which demands a more skilled workforce, while necessitating the nurturing of new professions.

When is automation unable to substitute for the human touch? In the book titled "Artificial Intelligence 2041" penned by former Google China's executive, Kai-Fu Lee and sci-fi writer Chen Qiufan, it is noted that three areas open doors to new types of work: "creativity, empathy and dexterity". For example, the "empathy industry" would promote people who are needed to offer empathy to other humans. These include social

workers, nurses and psychologists dealing with the impact of digitalization, such as computer related injuries and mental illnesses. A different kind of service industry has the possibility of emerging, complemented by new learning possibilities.

How then to help those who are out of work and who have yet to find new jobs and activities? Another idea being touted is to offer universal basic income to everyone. Yet, in UN circles, there is a divergence of opinions on this. Humans need more than such income because we all search for activities that are fulfilling and that enhance our self-esteem and self-actualization. Thus constructive occupations are still needed even if the State provides some guaranteed financial support. Social protection is also essential to cover access to health care and other supports, including access to different forms of education for "futures literacy" to enable people to recover, revive and rebuild the basics of life.

What about labour protection and the digital economy? There is a question as to whether "gig workers" who offer digital services from home interlinked with digital platforms are formal workers to be covered by the labour law. The latter may have to be adjusted to cover these workers explicitly. Hybrid work (work from home alternating with work at the office) is already prevalent in many countries and it also needs education and monitoring to ensure fair labour practices.

Algorithms. The issue of data and algorithms is all-pervasive today. Algorithms are linked with digital equations and instructions that enable the profiling of consumers in terms of their behaviour and have obvious implications in relation to the marketing of goods targeting that behaviour for commercial reasons. There are also privacy implications. Today, human rights-conscious countries are increasingly adopting laws on the protection of personal data so as to enable people to safeguard their right to privacy and the need for their consent if their data are to be used. Colloquially, "the right to be forgotten" has emerged as a key concern. It implies that when your data are put on the internet against your will, you can demand their removal from the platform; "to be forgotten".

What if such data and algorithms are used for criminal purposes? There is now a move towards an international treaty on cybercrimes but this invites education and caution because it may affect freedom of expression and may be abused especially by non-democratic regimes. The preferred example on this front is the European Convention concerning cybercrimes, known as the "Budapest Convention" to which some Asian countries are parties. Basically the Convention calls for the criminalization of specific internet-related activities, such as child pornography and fraud on the internet, rather than a general internet law which confers broad powers on the State to block information flow. Currently, a key danger in the Asian region is the emergence of internet gateway laws which enable the authorities to switch off the internet tap all too easily and arbitrarily. This will have great impact on education in general and the space for liberal learning and academic freedom.

3) Artificial Intelligence. As for the rise of AI, it is recognized that robots (and the like) can contribute much to help humankind. Two areas give rise to worries. A major concern is the use of AI for security and surveillance. An example is facial recognition technology which enables the identity of persons to be singled out, especially in undemocratic settings. Regrettably street demonstrators are identified remotely by such technology and are harassed by law enforcers and security personnel for repressive purposes. The human rights arm of the UN has already called for a moratorium on the use of such technology and this is especially resonant for Asia. To counter an overly surveilled society, people also need education and literacy to protect themselves through digital security.

Finally, there is the arrival of killer robots which need to be regulated. What is most concerning, however, is (self-)automated robots which can decide to attack and kill of their own accord, without being subjected to human command. The UN has also called for international regulation of these weapons and the global public needs to be aware of the situation through broadened educational process formally and informally, The most logical entry point on this front is to expand a treaty which already exists.

The Convention on Conventional Weapons is directly relevant and it prohibits, for example, blinding laser weapons. In future, this treaty might be expanded to prohibit killer robots which act beyond human command. However, many Asian countries have not signed up to this treaty and should be encouraged to do so.

While the three A's have much to contribute to humanity, an existentialist question is whether in future, that trio will overtake human intellect and know-how. That stage is called "singularity". Yet, there are two areas where those three A's are unlikely to supersede human capacity at least in the short term: consciousness and conscience. With that added value amidst the emerging futurism linked with the trajectory of education and literacy, humans still need to be in control and to be accountable; to be "humans in the loop".

\_\_\_\_\_

<sup>\*</sup> Vitit Muntarbhorn is a Professor Emeritus at the Faculty of Law, Chulalongkorn University. He has helped the UN as UN Special Rapporteur, UN Independent Expert and member of UN Commissions of Inquiry on human rights. He is the recipient of the 2004 UNESCO Human Rights Education Prize. His latest book is "Challenges of International Law in the Asian Region" (Springer 2021). Copyrighted:VM.